

# THE SCHOOL REVIEW

A JOURNAL OF SECONDARY EDUCATION

*Volume LXII*

\*

DECEMBER 1954

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*Number 9*

## EDUCATIONAL NEWS AND EDITORIAL COMMENT

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### EDUCATION AND THE MASS MEDIA

FOR TWO DECADES or more, teachers and laymen alike have been concerned about the impact on children and youth of the mass media of communication—newspapers, magazines, radio, motion pictures, and more lately television. The tremendous circulation of newspapers, periodicals, and comic books and the astounding size of radio and television audiences have alarmed teachers and parents. They have wondered to what extent and how permanently these new “educational” agencies have captured the minds and hearts of children and youth. The mass media have been referred to regretfully as the “unlicensed teachers” of our times.

Many school people have looked upon these media as strictly competitive. Here was unfair competition. These new media had invaded the sacred precincts of the home and the

school. Some educators were ready to engage the enemy in battle. The enemy must be routed. Others looked upon these new educative agencies as allies, at least as potential allies. While many teachers are still deeply concerned over the miseducative influences of some motion pictures and certain radio and television programs, it is safe to say that the profession in general is committed to the belief that these newer educative agencies are not to be combated but rather to be harnessed. Nor are they longer viewed simply as audio-visual *aids*; they are instructional materials in their own right.

Perhaps no single factor has been more influential in bringing about this conviction than the phenomenal development of television in the last three years, both commercial television and educational television. Only a few years ago a television set was a household novelty. Today, we are told, there are more television sets in

the United States than there are bathtubs! Recent reports estimate that nearly thirty million television sets are now in use. Every night in the week more than 60 per cent of them are turned on, and studies indicate that there are 2.8 viewers for every lighted set. This means some fifty million television-viewers every night. No wonder thoughtful people are seriously weighing the educational potential of television, whether labeled "commercial" or "educational."

*Educational TV* Most encouraging among the developments in television is the very rapid development of educational television. A few years ago educational television was only a dream. Today ten communities have educational television stations in operation: Houston; Los Angeles; East Lansing, Michigan; Pittsburgh; Madison, Wisconsin; San Francisco; Cincinnati; St. Louis; Ames, Iowa; and Columbia, Missouri. (Two of these, Ames and Columbia, operate on commercial licenses.) Nine other communities already have educational television stations under construction which will be in operation soon: Chapel Hill, North Carolina; Boston; Columbus, Ohio; Champaign-Urbana, Illinois; Detroit; Seattle; Oklahoma City and Tulsa; and Munford, Alabama. Twelve additional communities have made substantial progress in their plans to build stations: Memphis; Chicago; New Orleans; Athens, Georgia; Atlanta; Denver; Philadelphia; Cleveland; Miami;

Toledo; Nashville; and Birmingham. Furthermore, in thirty-two other communities educational forces are at work in efforts to establish stations.

In only two or three years, educational television has virtually come of age. In a recent special report to the Federal Communications Commission, the Joint Committee on Educational Television made this forecast:

It is not unreasonable to predict that by early 1955 we will have seventeen educational stations on the air with their programs regularly available to about twenty-five million people; and by the end of 1955, about thirty such stations will be beaming signals to areas with a population of around forty million residing in eighteen states.

What are the educational television programs like? It would be presumptuous for the writer to attempt an accurate description or appraisal, but some idea of their variety and value can be gained from a few illustrative programs.

One of the program series presented by the University of Michigan was a noncredit telecourse for adults on "American Political Parties." This series of thirteen thirty-minute programs was planned by faculty and TV professionals with faculty, students, and party leaders as participants. The series included such individual programs as these: "The Nature and Functions of Political Parties," "Features of American Political Parties," "Parties and Voting Behavior," "Parties and Interest Groups," "Parties in the Government," "Should We Reform Our Parties?"

At East Lansing, Michigan, the Cooperative Extension Service of Michigan State College provided a series of thirty-minute programs on "Better Farming." Designed as general-information programs for adult audiences, they were presented at 6:30 P.M. on Mondays through Fridays. They were planned by faculty members and station staff with faculty, administrators, and farm-group personnel as participants. The longer segments of the programs included demonstrations and visual reports by specialists in agriculture, followed by interviews between county agents and farmers in which motion pictures of farms were the high lights. Some of the individual programs within the series dealt with "Nitrogen and Your Corn," "Forest Products," "Livestock Auctions," "Fermented Milk Drinks."

A program entitled "Children's Corner," presented by the Pittsburgh station, illustrates a third type. Designed for information and entertainment for school-age audiences, the series consisted of one-hour programs presented Monday through Friday at 5:00 P.M. (1:00 P.M. during the summer). These programs were planned by the station staff with students, Junior League, Arts and Crafts Center personnel, and city-parks personnel as participants.

Under the title "From the Mind of Man," the station at Ames, Iowa, presented three separate series of thirteen programs each. These thirty-minute cultural and information telecasts were designed for adult audiences and were presented on Monday evenings at

7:00 P.M. The body of the show was made up of living-room discussion of great literary works and how they apply to our living today. Dr. Curtis Page, of the English Department of Drake University, served as moderator, with three panelists varying with each program.

The station in Houston, Texas, presented a series of fourteen thirty-minute programs on "Home Nursing." The series was so designed as to serve both as a program of general information and as a telecourse for adults. The series consisted of lecture and demonstration programs teaching a complete Red Cross course in home nursing. The estimated audience was 20,000. A total of 655 enrolled in the course.

It would be a mistake to suppose that educationally valuable television is to be found only on so-called "educational television" stations. On the contrary, the major commercial networks have presented many remarkably fine educational programs. Moreover, since the bulk of television in the United States has been, and will presumably remain, standard, or commercial, television, educators must be concerned with its development.

*"Omnibus"* In an effort to influence the mainstream of television, the TV-Radio Workshop of the Ford Foundation has produced a program under the caption "Omnibus." This it has done in the conviction that "a mature program incorporating educational and cultural values can achieve a large audience."

Last season "Omnibus" presented, during its 26 programs of an hour and a half each, 105 separate features covering an amazing range of programming. The series included thirty-six plays and dramatic features, fifteen features in the field of music and dance, fifteen presentations in the sciences and the arts, eleven presentations of contemporary life, and appearances of ten men and women whose contributions have made them noteworthy in their fields. This unprecedented range of programs included William Shakespeare's "King Lear," pictures of the first explosion of a British atomic bomb, documented dramas, and music, dance, and ballet commissioned for the program.

Presented on Sundays (5:00 to 6:30 P.M., E.S.T.) over 82 stations of the Columbia Broadcasting System and covering 80 per cent of the country's twenty-seven million television homes, an average of 13,743,000 persons saw the programs each week.

Yes, educational television, in the broadest sense of that term, has come of age. This gigantic medium for mass communication may well catch the schools unprepared. How effectively prepared are teachers and school administrators to take advantage of the learning experiences afforded to children and young people and adults through television? This medium must not be regarded as a novelty to be used to relieve boredom in the classroom or offered as a palliative in lieu of drudging homework. Unless school people are ready and willing and resourceful

enough to employ this new medium in directing the learning experiences of pupils, educational television will suffer a severe blow at the start, for educational programs are not likely to survive without a responsive and receptive audience. It behooves the profession to undertake the task seriously.

Paul Wagner, of the Film Council of America, writing in the October, 1954, issue of *Adult Leadership*, put the matter bluntly and forcefully. Here is what he said, in part:

Just to ease us into this disturbing discussion a bit more gradually, let us take a communications problem familiar to all of us. Do you recall how you were taught Shakespeare in high school? Remember Miss Budlong? And the six weeks you spent on *Julius Caesar*? Unless you and I are thinking of two different Miss Budlongs, the memory is apt to be somewhat less than exciting. In fact, 87 per cent of the students in one community have voted Shakespeare the study they *hate* most.

To anyone who has thrilled to an Old Vic performance or applauded Orson Welles in mufti, or watched Mason and Brando in the latest film version, or tuned in on Dr. Baxter's television program, this news is incredible. Here is a story that tells of dictators and the swaying of mobs and the strength and tragedy of those who would stand against tyranny. How could a story so timely and timeless ever be made so boring as to be hated by a vast majority of American school children? Easily!

Miss Budlong failed to ask herself WHAT she was attempting to communicate to WHOM and by what MEANS. To her, the material was a series of speeches, each to be endlessly "analyzed" both for grammar and for "meaning." The great historical sweep of the play was lost in the adverbial endings. Since she had failed to realize that her audience was composed of youngsters who were



under a constant bombardment of exciting stimuli—youngsters who spent far more hours with the fascinating Sid Caesar than parsing Julius Caesar—she was speaking a language as far removed from theirs as was Shakespeare's from that of his Anglo-Saxon forebears. This competition for the minds of the younger generation is not a fiction. It is very real. No use railing against the terrible comic books and the be-bop records that sell millions of copies or the silly films that parade a monotonous series of marital triangles. The student of today is learning from these. Whether the value of what he learns is golden or gilt matters not. He is learning from communicators who bait the hook with showmanship, with brightness, and with new technical devices.

And Miss Budlong's devices? A reedy voice and a textbook with unintelligible footnotes in six-point type. She had never heard of a tape recorder for eager fifteen-year-olds to dramatize a scene themselves (what audience of fifteen-year-olds wouldn't enjoy becoming actors, directors, and critics?). She had never heard of the great Mercury recordings of Orson Welles' production. If she had, her class might be able to compare their recording with his, possibly re-doing theirs or staunchly defending their own interpretations. And finally, Miss Budlong never heard of the British Information Service film on the Forum scene. Here, complete with togas and action and reaction, the greatest scene in Shakespeare beats at the blood. We are not criticizing Miss Budlong for her reedy, stumbling, and monotonous interpretation of Brutus; we are sorry, however, that she did not think to ask, "*What tools, what methods other than these do I have at my disposal?*"

The commercial communicators do ask these questions, and they come up with excellent answers. Unfortunately, WHAT they are communicating is often far less important to the welfare of the individual and the nation than what you and I would like to communicate to our fellow citizens. But when the commercial boys do address them-

selves to serious communication, they turn in a masterful job. While Miss Budlong is verbalizing, Laurence Olivier is rescuing millions of middle-aged Americans from their hatred of the Bard. At long last, Shakespeare re-read; Shakespeare discussed; Shakespeare's idea reborn.

#### MAGAZINES AND EDUCATION

TELEVISION AND RADIO, of course, are not the only educational media available to teachers. Magazines, whether large or small in circulation, constitute fruitful materials for learning both in the schools and out.

We live in a day when public enlightenment on current affairs is indispensable. While the old adage that what we don't know doesn't hurt us may never have been sound, it certainly is not true today. The interdependence of all segments of the modern world, brought on largely by technological annihilation of time and distance, calls for universal understanding of current human affairs. As Edgar Dale has so aptly said in a recent (October, 1954) issue of the *News Letter*, "What we don't know may hurt us terribly." In this same issue Mr. Dale quotes Lester Markel, of the *New York Times*, as follows:

About 30 per cent of the electorate, on the average, is unaware of almost any given event in American foreign affairs. . . . About 45 per cent of the electorate is aware of important events in the field but cannot be considered informed. . . . Only 25 per cent of the electorate consistently shows knowledge of foreign affairs.

Perhaps what we don't know is hurting us. In any event, as a nation

we can hardly afford to take the risk. The schools have a supreme opportunity, and a stern obligation, to facilitate universal public enlightenment through the encouragement of magazine-reading and through training young people in the intelligent and discriminating use of this organ of mass communication.

Mr. Dale, in the issue referred to above, presents a forceful argument for the teaching of magazine-reading in the schools and offers some valuable suggestions to teachers.

#### GUIDE TO THE STUDY OF WORLD AFFAIRS

NEWSPAPERS, too, are educational agencies. They bring to our young people daily happenings across the world. But this maze of news is not always understandable to young people. They need help in learning how to read newspapers and how to relate specific, current happenings to their programs of study in school.

To assist young people in this task, the *Minneapolis Star* sponsors a Program of Information on World Affairs as a service to teachers and students in junior and senior high schools. The heart of the program is a forty-eight-page guidebook with ready-to-use study outlines on twenty-six issues of the day. Topics for the coming year include "The Foreign Policy of the United States," "Russia's Role in World Affairs," "China's New Imperialism," "Segregation: A World Problem," "How Others See Us," and "Atomic Energy: Nightmare or Promise?"

In addition to the *Guide to the Study of World Affairs*, the Program of Information on World Affairs contains three other basic elements. One of these is a series of background articles published on Mondays in the *Minneapolis Star* during the school year. Advance copies are mailed to educators and group leaders without charge. Teachers who wish to duplicate these articles for distribution to students may do so, the only condition being that the articles be credited to the *Star*. Teachers who wish to purchase quantities of reprints of the articles may obtain them at cost.

A third basic element in the program is the weekly tests, which are "tied directly to the topics in the *Guide*, the background articles, the recommended basic pamphlets, and the full dynamic sweep of current world events." The tests appear in the *Star* on Thursdays with the answers on Saturdays. Keyed copies of the test are mailed to participants in advance and without charge.

The fourth element in the program consists of a periodical, entitled the *World Affairs Teacher*, which is published several times during the year. It is a small "house organ" published by the staff of the World Affairs Program and is designed as a medium of exchange of experiences among teachers who use the program.

The Program of Information on World Affairs was founded eight years ago by a group of leading Minnesota educators in co-operation with the *Minneapolis Star*. The program is directed by William C. Rogers, director

of the Minnesota World Affairs Center, University of Minnesota. He is assisted by an advisory committee of Minnesota educators and the news staff of the *Star*.

The forty-eight-page guidebook will be mailed to individual educators without charge. The *Star* makes a charge of two dollars to educators outside of the Upper Midwest area for the year's series of weekly materials. Inquiries should be addressed to Information on World Affairs Program of *Minneapolis Star*, Minneapolis 15, Minnesota.

#### USEFUL PRINTED MATERIALS

ONE of the features of these pages through the years has been the announcement of printed materials thought to be especially useful to teachers and school administrators. Some of the latest to be received at the editorial office are described in the following paragraphs.

*Discussion of moral problems* Teachers concerned with the problem of helping young people develop a moral conscience will be interested in a discussion kit recently issued by the National Conference of Christians and Jews under the title *Focus on Choices Challenging Youth*.

The folder, or kit, contains five copies each of six different pictures in black and white. Each picture illustrates one of the many moral dilemmas faced by young people today. The pictures themselves do not directly point a moral, nor does the accompanying printed matter. The pictures

are intended, rather, to serve as provocative means for bringing out into the open basic attitudes held by young people and to serve as points of departure for serious discussion of moral choices which young people must make. A series of discussion questions appears on the back of each picture. They are worded in such a way as to evoke free and easy discussion of the problems which are suggested to each viewer by the picture.

The purpose of the picture series and discussion guide is contained in the following paragraph:

As part of a national program to discover, identify, and apply our moral and spiritual resources for brotherhood, the National Conference of Christians and Jews prepared this discussion picture series for use with adolescents. Young people are alert and eager to think seriously about the moral decisions that they face. Their thinking is likely to be most fruitful when they have the benefit of skilful and mature guidance from adults. The pictures in this folder are designed to help focus discussions with adolescents on some of their fundamental values and major moral dilemmas where adult guidance and help can be most productive.

This picture series is a new departure in discussion materials for adolescents. It is hoped that users of these materials will experiment with ways of using them, and will let the NCCJ know how the pictures were used, giving suggestions and reactions.

Information concerning the kit, which is Series A, may be obtained from one of the many local offices of the National Conference of Christians and Jews. The Chicago offices are located at 203 North Wabash Avenue, Chicago 1, Illinois.

*Tests of Teachers of English and the College of foreign languages Board should find two recent publications of the College Entrance Examination Board unusually helpful.*

One of them is a booklet of thirty-six pages describing the Board's English Composition Test. The booklet not only contains a surprisingly generous sampling of the kinds of questions contained in the test but also provides an explanation of the way in which the test is conceived and built.

The booklet is addressed to students who will be taking the Board's English Composition Test and to their teachers. In this service alone the booklet is of inestimable value. The booklet should also prove to be exceedingly useful to teachers of English who desire assistance in building better English composition tests for their own classes. It would be difficult to find a more useful manual for this purpose.

The booklet closes with a message to teachers on the best way to prepare for the English test. Its soundness merits reproduction in these pages:

As is evident from what has gone before, there is no specific subject matter for the English Composition Test. There should thus be no incentive for cramming certain material into students' heads just before test time. Moreover, there would seem to be no advantage in concentrating on exercises similar to the kind expected to be found in the test. It is true that a familiarity with the kind of thing the test is likely to contain will guard the student against nervousness or panic induced by meeting materials he has never seen before; but the proper degree of

familiarity can certainly be obtained from this pamphlet.

What is most important for the student taking the English Composition Test is the ability to handle language, to know when ideas are well or badly expressed, when a clause, or a sentence, or a paragraph performs its function effectively and when it does not. This ability is almost native to a few, apparently; but, in general, those who must develop it do so in two ways: they read a lot and they write a lot. They do not read just anything, any more than they write in just any manner. They read good literature of all kinds, and they write about all kinds of things. They are helped in their choice of reading, of course, and they are guided in the development of their writing ability. But they are not helped to choose any specific reading, nor are they guided in any particular way. Familiarity with the good that has been written brings with it a feeling for a better as opposed to a worse way of saying things; and practice in trying to say things well increases the facility with which they can be said. The teacher who wants a formula for preparing his students for the English Composition Test must be disappointed, unless he will accept the very general one: See that your students do a lot of reading and writing; help them with both.

The booklet on foreign languages is designed to show students and teachers what the Board's tests are like in French, German, Latin, and Spanish. It contains—

a descriptive explanation, in simple language, of the tests' preparation, the types of questions they may contain, and the variety of language abilities they enable the student to exhibit. The booklet does not define the exact scope of the tests or the exact emphasis given to different phases of these subjects. In spite of this, it should give teachers confidence that their objectives and the Board's are not far apart. Students will find the

booklet useless for cramming, but it should give them, too, confidence that these College Board tests will reward the results of intelligent application to a good course of study.

Like the booklet on the English Composition Test, this one should prove of inestimable value to teachers for the information it gives on the nature and content of the College Board's tests in foreign languages and for the help teachers may obtain in building tests for their own classes.

Both booklets, as well as two others concerned with mathematics and science, may be obtained from the College Entrance Examination Board, care of the Educational Testing Service, Post Office Box 592, Princeton, New Jersey, or Box 9896, Los Feliz Station, Los Angeles 27, California. The cost is \$0.50 a copy.

*Careers in television* Teachers of courses in careers and vocational-guidance counselors will welcome a new guide for young people interested in television. This book of 142 pages, entitled *Your Place in TV*, presents to young people a comprehensive picture of the opportunities and requirements for careers in this rapidly expanding communications industry.

The book opens with a chapter which points up the youthfulness and dynamic quality of the industry. This is followed by three chapters which describe career opportunities in the technical, administrative, and creative divisions of the field. The last chapter describes a variety of job opportunities

closely identified with television. About a third of the book is comprised of an Appendix, the first part of which lists and describes sixty-six types of positions and gives the qualifications needed in each. The Appendix also includes a listing of colleges offering courses in television, a listing of technical schools for television, a bibliography of recommended readings, and a list of allied TV organizations.

*Your Place in TV* was prepared by Edwin B. Broderick, director of Radio and Television Communication for the Archdiocese of New York, and is published by David McKay Company, Inc., 55 Fifth Avenue, New York City. The price is \$2.75.

*Citizenship education* It is now axiomatic that one of the primary purposes of public education in a democracy is the development and maintenance of a high level of citizenship. In recent years, particularly, a number of comprehensive and long-range efforts have been undertaken to strengthen citizenship education in the schools. One of these is the Citizenship Education Project which since 1950 has been an integral part of the project in curriculum development in Illinois known as the Illinois Curriculum Program.

A recent report under the title *Citizens Today: Young Citizens in Action in Illinois Schools* outlines some of the underlying principles on which the Citizenship Education Project is based and describes in some detail types of citizenship activities carried on in the



pilot schools collaborating with the project. Emphasis in the project has been on laboratory practices which provide students opportunities to exercise citizenship skills, knowledge, and understanding in real school and community situations.

Teachers and school administrators should find this report useful in planning their own programs of citizenship education. The report is Bulletin 21, Circular Series A, No. 51, Illinois Curriculum Program. Inquiries should be sent to Vernon L. Nickell, superintendent of public instruction, Springfield, Illinois.

*Education in health* Good health has long been one of the cardinal objectives of education, but the role which the school should play in the total health program of the community has never been quite clear.

About four years ago a Co-operative Committee on School Health Education was formed by representatives of the American Association of Colleges for Teacher Education; the American Association for Health, Physical Education, and Recreation; the Association for Childhood Education International; and the Department of Classroom Teachers and the Department of Elementary School Principals of the National Education Association. The committee undertook:

(1) To learn directly from elementary-school personnel what they believe to be the most important health problems among elementary-school children; (2) to learn directly from experts in the field of health and health education what they believe to be the most important health problems of elementary-

school children; and (3) to make available to those concerned the problem data obtained with suggestions for their solution.

Basic data on health needs were gathered from schools in ninety-one towns and cities located in thirty-two states. In addition, thirty-four authorities in the field of health contributed their thinking as to the most important health problems of children. The problems identified by health experts and elementary-school personnel were classified into eight major categories: (1) "Healthful School Living," (2) "Nutrition," (3) "Emotional Health," (4) "Disease—Prevention and Control," (5) "Rest and Recreation," (6) "Cleanliness," (7) "Dental Health," (8) "Vision and Hearing."

The findings of the committee are presented in a monograph of eighty-two pages entitled *Health Needs of School Children: A Report of Problems as Seen by Teachers*. The monograph is published by the American Association of Colleges for Teacher Education, 11 Elm Street, Oneonta, New York.

*Careers in health* The seven million young people now attending high school will soon be supplied with authentic information about career opportunities in the field of health. A nation-wide project, known as "Operation Health Career Horizons," has been launched to help increase the pool of manpower the nation needs in health work. By bringing to the young people in our twenty-six thousand high schools information on a wide range of health-career oppor-

tunities, the project is designed to open new channels of recruitment for the health professions and their supporting sources.

This project, unique in its comprehensiveness, is sponsored by the National Health Council with support from the Equitable Life Assurance Society of the United States, one of the council's sustaining members. "Operation Health Career Horizons" is a direct outgrowth of the council's National Health Forum held last March. At that meeting leaders in education joined with representatives of the forty-eight national health organizations which comprise the council in recommending nation-wide action to bring health-career information to young people throughout the nation at the time they are making their career choices.

The "Health Career Horizons" project will produce and distribute three publications: (1) a kit of materials in the form of a guidebook for teachers and vocational counselors, (2) a brief leaflet for young people and their parents, and (3) a series of health posters for school and community use. The materials will be sponsored, approved, and issued by the National Health Council.

Three advisory committees, representing the National Health Council, the National Association of Secondary-School Principals, and the National Vocational Guidance Association, have been appointed to advise the director of the project, who is Howard Ennes, Bureau of Public Health of the

Equitable Life Assurance Society. Inquiries should be addressed to Mrs. Zilpha C. Franklin, Health Careers, National Health Council, GPO Box 1400, New York 1, New York.

*Help for administrators*—The September issue of the *Administrator's Notebook*, published monthly by the Midwest Administration Center, University of Chicago, features a summary of research by J. J. Valenti. Professor Valenti, now at Loyola University in Chicago, developed a scale designed to measure the attitudes of administrators and teachers toward the social role of the teacher. A revision of the scale was used by T. Edison Smith in the measurement of leadership attitudes of teachers and administrators in schools in Minnesota.

Each four-page issue of the *Administrator's Notebook* summarizes one or more research studies and raises pertinent questions designed to assist school administrators in applying the findings of research to their own problems.

During the first two years of its publication, the *Administrator's Notebook* was circulated without charge to administrators who requested it. The increased demand for the *Notebook* has made it necessary to establish an annual subscription charge of \$2.00. Subscriptions to the *Notebook* may be sent to its editor, W. W. Savage, Midwest Administration Center, University of Chicago, 5835 Kimbark Avenue, Chicago 37, Illinois.

HAROLD A. ANDERSON

## WHO'S WHO FOR DECEMBER

*Authors of news notes and articles* The news notes in this issue have been prepared by HAROLD A. ANDERSON, director of field services and director of student teaching at the University of Chicago. SAMUEL MILLER BROWNELL, United States Commissioner of Education, identifies the most pressing problems in education and describes the efforts and proposals made by the federal government to assist the states and local communities in solving these problems. VIRGIL E. HERRICK, professor of education at the University of Wisconsin, considers advantages and disadvantages of the common approaches to programs for improving instructional procedures and points out the need in all such programs for effective organizing centers. ARTHUR H. MENNES, principal of the Central High School, Sheboygan, Wisconsin, gives the results of an opinion poll to determine student preference for core or conventional classes. JAMES E.

FRASIER, supervisor of junior high school education in the public schools of Omaha, Nebraska, cites the failure of teacher-education institutions to provide for the preparation of junior high school teachers and reports results of a study to determine desirable qualifications for these teachers. ALLAN O. PFISTER, research associate in the Department of Education of the University of Chicago, and MANNING M. PATILLO, assistant professor of education in the same institution, present a list of selected references on higher education.

*Reviewers of books* PAUL L. DRESSEL, head of the Board of Examiners at Michigan State College, East Lansing, Michigan. E. R. BRESLICH, associate professor emeritus of the teaching of mathematics, University of Chicago. GEORGE M. KAISER, psychologist, Laboratory School, University of Chicago.

## UNSOLVED PROBLEMS IN AMERICAN EDUCATION<sup>1</sup>

SAMUEL MILLER BROWNELL

*United States Commissioner of Education*



OUR greatest national resource is found in the oncoming generations. The security of America and the hopes of the free world depend on the ideas, the ideals, the ingenuity, and the competence of each generation of young people. And the complexities of today's world call for greater knowledge, skill, and understanding than ever before. Hence education, whether at home, at school, at church, or in our schools, becomes more significant than ever.

As we face the problems of education, we shall be guided by the wise principles of our forefathers: that the control and management of schools is properly a local and state function and that the federal government aid and promote the cause of education without interference. To those principles we are dedicated.

Vigorous efforts are being made by the states and local communities to provide new school buildings and

teachers. Yet we find great inadequacies in the educational opportunities provided the youth of this nation.

### INCREASED ENROLMENTS

Turning to the problems created by the recent large increases in pupil enrolment in both elementary and secondary schools and an anticipated increase in college enrolment, we may consider not only the current increases but also the expected continued increases up to 1960. Comparison of total enrolment of children aged five to seventeen from 1930 to 1953, according to the Bureau of the Census, shows a net increase of 6.4 million children, from 25.4 million to 31.8 million.

The most notable changes in the holding power of schools are found in the early and the later age groups. For five-year-olds the increase in the per cent of children enrolled in schools is from 20 to almost 60. For six-year-olds it is from 66 to 98 per cent. Similarly, the proportion of sixteen- and seventeen-year-olds has risen between 1930 and 1953 from about 57 per cent to 75 per cent.

Increasing numbers of school-age

<sup>1</sup> Address delivered at the Conference on Applying Research in Educational Administration held at the University of Chicago, July 19-23, 1954, under the sponsorship of the Midwest Administration Center, Co-operative Program in Educational Administration.

children and larger percentages of children remaining in school are loading schools very heavily now, and they are likely to continue to do so in the future.

One of the specific challenges facing America is the need to educate new millions of students. We have roughly 11 million young people in the 15-19-year-old age group; approximately 16 million children in the 5-9-year-old age group; and about 17 million youngsters in the group under five years. These rising waves of people to educate are clear calls to action.

The impact of these new millions of students on elementary schools, on high schools, and on colleges is obvious. In 1954-55 we shall have approximately 38 million students in school and college. Looking ahead, we can forecast at least 45 million enrolled in all levels of the educational system in 1960, *provided* the facilities of housing and staff are available. These estimates of future enrolment are conservative. If the trends for larger percentages of five-, six-, and seven-year-olds to be in school and of sixteen-, seventeen-, and eighteen-year-olds to stay in school continue, the estimate of 45 million in 1960 will have to be revised upward. A future rise in enrolment beyond 1960 is to be expected in light of the larger number of family units which will develop in the 1960's.

If we are to meet the individual and collective challenge these millions of young people constitute, we must provide the kind of education which develops in each youth the skills and in-

sights to make him a productive citizen in a free republic.

#### SHORTAGE OF SCHOOL FACILITIES

These increases in enrolment have created another problem of tremendous proportions: the acute shortage of school facilities. Providing the necessary school buildings and equipment is complicated by past inaction. Today we do not start "at scratch." Instead we have a deficit problem on our hands.

In spite of record numbers of new facilities—47,000 new classrooms built in 1951, 50,000 in 1952, and more than 50,000 in 1953—we are still not keeping pace with increased birth rates and the greater holding power of schools.

The *Report of the Status Phase of the School Facilities Survey*<sup>2</sup> reveals that in September, 1952, the nation was short 312,000 public elementary and secondary classrooms and related facilities. It is now estimated that for the school year 1954-55, the classroom shortage will be 370,000. During the next five years it will require 100,000 classrooms for normal replacements and 250,000 classrooms to accommodate a five-year enrolment increase. Thus, if we are to erase the backlog and care for the growing needs, it will be necessary to construct, during the next five years, approximately 720,000 public elementary and secondary

<sup>2</sup> *Report of the Status Phase of the School Facilities Survey*. Prepared by William O. Wilson and James Woolter. United States Office of Education. Washington: Government Printing Office, 1954.



classrooms and related facilities, at an estimated capital outlay investment of approximately 28 billion dollars. The present construction rate of approximately 50,000 classrooms a year will have to be nearly tripled if we expect to provide adequate and satisfactory schoolhousing for the American boys and girls during the next five years. If present rates of construction are continued over the next five years, we shall still have a backlog need of 470,000 classrooms. This is the picture for public elementary and high schools. It does not include the needs for higher education.

#### SHORTAGE OF TEACHERS

There is at present a shortage of 124,480 teachers in American elementary schools. The shortage exists because of two factors: (1) newly qualified teachers are not sufficient to make up for those who leave the profession and (2) the numbers of pupils are increasing rapidly.

Faced today with a decreasing number of qualified teachers in the elementary schools at the same time that the number of pupils is increasing, we are heading toward even more serious teacher shortages unless immediate action is taken. The birth rate in the United States is still rising. Furthermore, high-school and college teacher shortages are ahead unless we train more teachers now.

#### FUNCTIONAL ILLITERACY

One national problem that costs the nation heavily in trained citizens is

that of functional illiteracy. If a "functional illiterate" is defined as an individual with less than five years of schooling, we find that approximately ten million adults are functional illiterates. And these are not just the older persons. In five states, 12-18 per cent of the 25-34-year-old group are functionally illiterate. In eleven other states, 4-12 per cent of these young adults have less than five years' schooling. The draft rejection rates for failure to pass the Armed Forces Qualification Test ran from 35 to 58 per cent in nine states. The national average is 19.2 per cent. As a result some states are obviously called upon to provide more than their proportionate share of manpower for the armed forces. The concern of every state with the high functional illiteracy in certain states is thus apparent.

#### HIGH DROP-OUT RATES

The drop-out rate in many schools is another problem of great importance. The record of 1,000 children entering Grade V in the public schools in 1943 indicates the possible relation of drop-outs to functional illiteracy, delinquency, social and economic competence, and military service. By the end of Grade VIII, nearly 200 of every 1,000 had left school; by the end of Grade X, 200 more. Another 100 drop out in Grades XI and XII. In other words, just about half of the 1,000 fifth-graders finish high school, although many who drop out have the ability to continue.

### ABC'S OF THE NATION'S SCHOOL PROBLEM

These facts—known more or less to all—we might consider the ABC's of the nation's school problems. They present, I think, the picture of a dynamic nation increasing its potential power, building its greatest resource—youth—*provided* it perfects that raw material to be a resource and not a handicap. Children in a family, a town, or a nation can be the greatest headache and heartache and drain on adults or the greatest joy, satisfaction, incentive, and source of strength and security. We can see the problems of feeding, housing, education, clothing, and entertaining these children as a challenge or as a chore. I believe that most of our people see the situation as a challenge. They want to see adequate education provided. They want to see it provided by local communities and states, rather than by the federal government. They want it provided as efficiently as possible.

### PROBLEMS REQUIRING STATE OR NATIONAL ACTION

When we study the problems of the schools in any local community, we find that, up through the secondary-school level, communities have much more freedom to determine what shall be the amount and kind of school curriculum than most citizens realize. But many communities are limited in doing what they would like to do for school children by conditions that involve other districts, such as conditions controlled by state law and

hence requiring state legislative changes. Here local citizens' groups feel frustrated. Let me mention a few of the common problems requiring action at the state, or possibly national, level.

1. *School support.*—Local school support in most school districts is limited to the source of local taxation—the property tax. Most districts have not assessed property at its present value. In many cases they would be willing to do so in order to increase school-tax revenue, but, if they did and their neighbors did not, they would have to pay a higher portion of the county taxes, they would lose state "equalization" aid, or otherwise penalize themselves. A few states have taken steps to equalize assessment values on a state-wide basis. Until this is done in some way, it is virtually impossible for states or the federal government to determine which are really needy school districts, if aid is to be given to needy districts.

2. *School districting.*—There are about seventy thousand school districts in this country. In the past twenty years much progress has been made in eliminating inefficient districts, but there are still thousands of teachers in one-room schools teaching fewer than twelve children. With the shortage of prepared teachers, we cannot afford to put other children on one-half and one-third sessions while tying up these rural teachers. There are hundreds of high schools enrolling fewer than one hundred pupils, many located within easy bus distance of a

school that would be improved if the two or more districts combined. But some school districts would lose in state aid if they merged, because there are laws which hinder reorganization, or because there is no legislation, or because there is not enough tax incentive to encourage efficient districting.

3. *State support for capital outlay.*—One way for states to encourage efficient districting and to relieve the local property tax, without increased state domination of curriculum is through use of state resources—money from sources other than the property tax—to assist in school construction. Few states have developed programs of loans, have guaranteed bonds to reduce local interest, or have made outright grants-in-aid to help school districts. They have not reviewed their tax and bonded-debt limitations, most of which were developed during depression conditions.

4. *Teacher certification.*—One of the big elements in the shortage of prepared teachers is the loss each year of many who are not at the retirement age. We are seeking more facts on this problem, but some preliminary evidence indicates that such factors as these are involved.

a) Some teachers, on achieving eligibility for a minimum teacher pension, shift to a job where they can also secure social security. It is possible that, if states were to make teachers eligible for social security in addition to present teacher retirement, they could, at a minimum cost, retain many experienced teachers. They would also

make teaching throughout a state more attractive as a career.

b) Another loss seems to lie in the lack of uniform certification requirements in the states. Experienced teachers moving to a new state sometimes find that the steps needed to qualify for certification are enough to prevent their putting in the time and effort. Local districts can do little about this; correction of the situation takes state action.

c) Providing adequate, attractive colleges for teacher education, either as separate colleges or on university campuses, is beyond local school districts. Yet there is a relation between college enrolment and good college facilities and college recognition.

These conditions are enough to point out that, in meeting the school needs of the country, we cannot stop at citizens' committees and action programs at the local level. It becomes evident that state action programs are needed. It takes planning and money to bring together citizens and educators for this planning.

#### ACTION OF THE FEDERAL GOVERNMENT

What steps, if any, are being taken by the federal government to speed up more rapid, effective, and continued action on school problems at local, state, and the national level? I should like to mention four steps and comment on a fifth proposal.

1. *Schools in federally affected areas.*—The first session of the Eighty-third Congress extended Acts 815 and 874

for school construction, operation, and maintenance of schools in federally affected areas. The amount involved in 1954 is \$130,850,000.

2. *Reduction of federal taxes.*—The federal government, by reducing federal taxes, is making it easier for states and local communities to support state and local activities—and this is *without federal control*.

Congress has acted favorably on two proposals to help secure basic information needed by citizens and educators to improve education, namely, a proposal for an Advisory Committee on Education and an authorization for a co-operative research program.

3. *National Advisory Committee on Education.*—In order that major educational problems of national concern might receive careful study and follow-up, the administration proposed that there be appointed a committee of nine lay citizens, with three-year overlapping terms, as an Advisory Committee on Education to the Secretary of the Department of Health, Education, and Welfare. This committee, with the United States Commissioner of Education as an ex officio member, would meet at least three times each year to consider education problems of broad national scope which need thorough study. The committee would advise on the order of importance of such studies and recommend those that should be undertaken. Such studies would be made by task forces and might take two or three years for completion. The committee would make recommendations

to the Secretary based on these studies and would also recommend to the Secretary action which should be taken from time to time to follow up the findings of the studies. This would provide, year after year, a series of studies on fundamental educational problems of broad national scope and would facilitate effective follow-up action.

4. *Co-operative research programs* — At present there is no way for the Office of Education to take advantage of much potential research service available in colleges, universities, or educational agencies. In other fields, such as public health, co-operative research between the federal government and such agencies has shown great returns for each federal dollar spent. Co-operative research authority would provide an opportunity to increase the research service of the Office of Education greatly without adding to the permanent staff of the Office. A co-operative research program will be started modestly in order to develop policies and procedures which will be most effective.

5. *State and White House Conferences on Education.*—In order that proper consideration be given by citizens to the increasingly grave educational problems, it was proposed that each state call a conference of citizens and educators to consider the problems of preparing youth for its responsibilities. These conferences would center attention on the ways in which state and local resources could be mobilized. After these state confer-

ences have met and planned their educational programs, representatives would come together in Washington from all the states to consider educational problems in a national focus, but on the basis of grass-roots study.

Citizen groups in towns and cities can get together easily and frequently. They can get the facts, study them along with the educators, arrive at reasonable plans of action, and then work to persuade others to favor the action program. The result has been approval of school-building bond issues and increased salary schedules in thousands of communities. School curriculums have been modified to reflect community needs and interests. Citizens have come to understand better what the schools are doing and are trying to do and what they need.

But many localities have found that, after going as far as they can, certain conditions are impeding further progress. Some of these are:

Limitations in financing local school districts almost exclusively through property taxation

Limitations on the rate of taxation for school purposes

Maximum ceilings on bonded indebtedness

Difficulties in securing teachers because state legislatures control budgets for teacher-education facilities

Legal limitations on freedom to reorganize school districts

Inequities that would result from raising local assessed valuations unless these are raised generally throughout the state

These factors indicate that essential action on meeting some important school needs can be taken most effectively at the state level or only at the

state level. Because it is much more difficult and expensive to develop an action program at the state level than at the local community level, the administration proposes to help local and state groups.

The State and White House Conference Bill provides the machinery to assist citizens in each state to develop the kind of educational program they want and need. It makes it possible for representative citizens and educators to come together to do the preliminary pre-planning, study, and assembly of materials and proposals on pressing educational problems. Then a larger representative group of citizens and educators could come together to study the situation thus carefully presented and could decide on an action program.

The point is that we need to move faster than we are at present in mobilizing resources to solve our educational problems.

In summary, we believe that the pattern of citizen-educator co-operation on the local level is the soundest course. We believe that the federal government should assist and encourage the states to bring together representative citizen-educator groups to work out such action programs, because speed is needed and because it is more difficult to get state action programs developed than local ones.

The White House Conference would serve a complementary and a somewhat different purpose. It would:

Emphasize the importance of education to the national well-being



Report on the progress being made in the several states

Summarize the resources available and needed to keep American education operating at the level essential for national security and well-being

Demonstrate clearly what the citizens of the forty-eight states can do to meet their educational needs

Give great impetus to the speed-up in educational efforts needed in these coming years throughout the country

Show citizens the nation-wide significance of local schooling

I have no illusions that the State and White House Conferences will solve the problems of education in this country, but I believe that they can be, and will be, important and helpful.

This proposal will provide aid to states and localities by the federal government which in no way imposes federal controls. It also will provide evidence, not now available, to show whether our citizens believe that the federal government should maintain its present relationships to education, do more, or do less.

The growth in citizen interest and concern about the schools of the nation, teamed with the efforts of well-prepared educators, is the unbeatable force that will accomplish what we know needs to be accomplished. The effort to be exerted is not something that can be temporary. Improving our schools is a long-range job.

## APPROACHES TO HELPING TEACHERS IMPROVE THEIR INSTRUCTIONAL PRACTICES

VIRGIL E. HERRICK

*University of Wisconsin*



IN ATTEMPTS to help teachers improve their instructional practices, much attention has been paid to the nature of the personal and group dynamics which are important in understanding and modifying individual and group behavior. The attention of this article, however, without minimizing the importance of the latter, is on the nature of the problem or problem area which serves to focus and organize the activities of teacher and staff in programs of educational improvement. It is the thesis of this discussion that the problem or problem area which serves as the organizing and developmental center for the activities of a group of people has not been given the attention it deserves as a definer of appropriate intellectual and social processes, as a limiter and determiner of organization and continuities of group and staff work, and as an assurer of actual changes in teacher behavior.

The material presented here does not document this point of view completely, but it is argued that the merit of this general proposition is made more explicit by an examination of five commonly used approaches to ed-

ucational improvement: (1) improvement through the identification and definition of the objectives of the educational program, (2) improvement through the development of subject areas of the curriculum, (3) improvement through development of programs of child study, (4) improvement through the recording and analysis of learning episodes, and (5) improvement through programs of action research.

### IMPROVEMENT THROUGH DEFINITION OF OBJECTIVES

There are many good things to be said about the attempts of teachers to define their educational purposes.<sup>1</sup> Because objectives are one of the essentials of any learning experience, all projects related to the teaching-learning situation must, at some point, consider the role and function of objectives. Therefore objectives at the over-all level of definition involve every teacher, every child, every area

<sup>1</sup> Nolan C. Kearney, *Elementary School Objectives*. New York: Russell Sage Foundation, 1953. On a national basis this study by the Russell Sage Foundation illustrates all the problems of this approach to be found also on the local level.

of the curriculum. Difficulties arise, however, when there is an attempt to move from this over-all level of definition to the particulars of each subject area and of each teacher's responsibility.

First, while improvement through definition of objectives seems to be a logical first-things-first place to start, *psychologically* the definition of objectives is not the problem of initial primary importance for teachers in their work with children. Objectives need a referent point, and, to a teacher, that referent point is the child and the things the child is doing.

A second difficulty is the broad gap which exists between lists of objectives and instructional practices. Many teachers have spent long hours defining objectives and then did not know what to use the objectives for other than to make fine statements in the newspaper or to put them on the back of report cards. There is need for a clearer conception of the role and function of objectives in instruction. Teachers have this conception of the function of objectives in evaluation<sup>2</sup> but often do not grasp its significance for teaching and learning.

One important aspect of this second difficulty stems from the level of definition. The whole staff sees how it can operate in defining the over-all objectives of an educational program but has difficulty in grasping the relation of these general statements to the spe-

cific objectives of each subject field. This difficulty is caused by the fact that the specific instructional objectives of a subject field are derived, not from the general statements of purpose for the educational program as a whole, but from the nature of the subject field itself. This dilemma forces a staff to divide into subject or grade-level groups, which then go in their various separate and frequently independent and competing directions.

Fundamentally, this approach to educational improvement is of great value in emphasizing an essential component of all learning—the identification and definition of important educational goals. Its weakness stems from the lack of related application points which have high face validity for teachers and for the educational experiences that children have in school.

#### IMPROVEMENT THROUGH DEVELOPMENT OF SUBJECT AREAS

The time-honored approach to educational improvement has been through attempts to improve various subject fields. The argument is simple and direct: since our educational program is divided into subject units, why not use these units as the place where we start working on the educational program? The critical place to start is in the subject area where the need is greatest—usually where public opinion or an achievement test has pointed to the greatest deficiency.

This approach has good points in its favor. A subject field, such as reading or science, provides any working

<sup>2</sup> Eugene R. Smith, Ralph W. Tyler, and the Evaluation Staff, Commission on the Relation of School and College. *Appraising and Recording Student Progress*, pp. 3-34. New York: Harper & Bros., 1942.

group with an organizing center of high visibility. Unlike work on objectives, teachers see work on a subject area as having the potential, at least, for helping them meet their daily teaching responsibilities. Another major advantage of this approach is that work in a subject area will force a staff to consider at some time the essential components of all learning—objectives, selecting and organizing learning activities, materials, evaluation, planning, and children—in a familiar context which gives these components meaning and significance.

Like all good things, however, this approach offers some real problems. While objectives need an application point to make them usable and meaningful, a particular subject area represents only one of many such areas in an educational program. For this reason, projects organized around subject fields will always suffer from the fact that different subjects compete for attention, time, major emphasis, space, and facilities. This approach, then, is constantly concerned with problems of relations among subject fields and of methods for involving all people in the different areas, at different levels, at appropriate times. This fact is responsible for the insistence on the part of teachers for programs of in-service education organized on a grade and department basis—a form of organization which frequently prevents the examination of the nature and scope of the over-all program, which is so important.

A subject field, moreover, is fundamentally a geographic definition of a

portion of the curriculum: it defines an area, with boundaries, a topography, and various phenomena and facts. This kind of definition, while pointing out a *place* for the staff to look, does not define *what* they should look at. As a consequence, subject areas are attacked in many wondrous ways. Frequently these ways are based on little or no thought as to what the important components of a subject field are or what are the significant things to study and improve. Perhaps most serious in this approach is the absence of any frame of values—so necessary in any program of improvement—for making decisions on the relative importance of alternative procedures, materials, and activities.

#### COMPARISON OF TWO APPROACHES

An examination of these two approaches indicates that any project which attempts to help teachers improve their instructional procedure should permit the kind of examination and study which will enable teachers to become aware of the breadth or range of things important, to examine their possible relations, and to perceive their extensions to future activities. Each of the two approaches considered has contributed an essential aspect of an in-service program, but neither has been complete in itself.

#### IMPROVEMENT THROUGH PROGRAMS OF CHILD STUDY

Perhaps the child-study programs developed by Prescott<sup>3</sup> at the Univer-

<sup>3</sup> a) *Helping Teachers Understand Children*.  
By the Staff of the Division on Child Develop-

sity of Chicago and later at the University of Maryland are well enough known to be representative of this approach to the improvement of educational programs.

The values of this approach are many. Child-study programs deal with the center in learning—the child—and focus the attention of all teachers on the major point of action and application in all teaching. For this reason, programs of child study can be used by all teachers irrespective of level of work and area of interest. Child-study programs, however, have been more successful with elementary-school teachers than with high-school teachers. Most elementary-school teachers deal with only one group of children and thus are in a better position than are high-school teachers to observe, and to apply the results to, specific children.

Child study is, moreover, the first approach to the improvement of instructional practices which has centered on an aspect of the educational program—children—which has similar validity for both teachers and parents. This kind of study is easily understood by the communities that schools serve. For the first time, too, in the approaches considered, the scientific method has been made an in-

tegral part of the method of work. The importance of careful observation, formulating hypotheses, postponing judgment, trying out ideas, and predicting and testing consequences is constantly being demonstrated to teachers. Through this approach, teachers gain insights into children and into themselves which can be applied to their teaching at any time. In addition, focusing the attention on the child takes the pressure off the teacher and frequently permits him to examine his own teaching in a relaxed and constructive fashion.

Some of the major difficulties of the programs of child development, other than the common danger that any definite program may become ritualized, grow fundamentally out of the relation of child study to instruction and curriculum. Many teachers find it hard to relate child study to what they are doing in reading, arithmetic, spelling, and history, because for most programs the child is not the organizing center for the instructional program. The subject matter, the instructional materials, the facts and skills to be learned are, for most teachers, the organizing foci, and children are related to these. Teachers, therefore, resist making, or try too hard to make, applications of child study to their teaching. As a consequence, while children are treated better, it is likely that little or no change in the instructional program or practice takes place. Child study needs a theory of curriculum to go along with a theory of growth and development.

ment and Teacher Personnel. Washington: American Council on Education, 1945.

b) Elizabeth Zimmermann and Virgil E. Herrick, "A Child Study Program: One Phase of a Cooperative Study," *Educational Administration and Supervision*, XXXV (April, 1949), 193-205.



#### IMPROVEMENT THROUGH USE OF LEARNING EPISODES

One way to relate child study to instructional activities is to have teachers look at their teaching situations and keep a short record of what is actually said and done.<sup>4</sup> This record can then be studied for the purpose of seeing how children, objectives, ideas, skills, materials, subject areas, and teaching procedures all go together in a desirable educational program.

One of the advantages of this approach is that the attention of the staff is focused on ongoing learning activities in which children and the teacher are the active agents. This kind of organizing center has tremendous immediate significance and validity for a teacher. The argument supporting this approach is that, if one wishes to help teachers make changes in the learning activities of children, a good place to start is to help them look at these activities in a constructive, analytical fashion.

The process of observing, recording, and analyzing learning episodes forces the teacher to consider all the important components of curriculum and instruction and, what is more important, to look at them operating in some meaningful relation to one another. One of the advantages of this approach is that the necessity to consider all learning components in a meaningful relationship affords the

teacher a basis for making desirable changes in instructional procedures.

Some of the difficulties of this approach stem from the fact that, in effect, the teacher is trying to observe himself in a complex learning situation where he is the central figure. This makes it difficult to obtain good records and difficult for the teacher to look at himself and the children objectively and critically. Any examination of an episode is an examination of the teacher and, indirectly, of his professional prestige. Some teachers feel that this is like undressing with the window shade up.

Disregarding the personal nature of recorded episodes, they are, like all complex, dynamic social and educational situations, difficult to analyze. Again, there is need for a comprehensive curriculum theory to guide the study of learning episodes—to help teachers know what to look at, what to relate, and what to generalize about. Learning episodes are two-dimensional in the sense that insights gained from their study can be applied to other teaching situations and that, similarly, insights or understandings gained in other areas can be applied directly to the episodes being examined. The two-dimensional quality of a learning episode is the basis for one of its difficulties, namely, the need for paying proper attention to the important instructional and curricular problems which grow out of its analysis. This approach combines the values of child study—the stress on children as the center of attention and the

<sup>4</sup> Virgil E. Herrick and James Knight, "Child Study and the Improvement of the Educational Program," *Elementary School Journal*, LII (March, 1951), 371-79.

use of the scientific method of learning—within an educational context which gives that study curricular significance.

#### IMPROVEMENT THROUGH ACTION RESEARCH

Improvement through action research<sup>5</sup> is based on the hypothesis that educational improvement is founded on responsible analysis, generalizing, and action by teachers when dealing with their educational problems. The nature of the problem attacked is not too important as long as it provides an opportunity for adequate definition, hypothesizing, collecting and analyzing data, generalizing, and the use of these generalizations to improve the problem situation.

The major contribution of this approach is its emphasis on the use of the scientific method of problem-solving, which can be applied to any problem by any individual or group. Further, it emphasizes the intent behind all learning: the positive, constructive use of the learning product to influence and improve future action and behavior. An important part of this process is the effort to bring the proper resources and knowledge to the solution of the problem under consideration. Practice in this method and procedure by the teacher and staff should make them more willing and able to use this same procedure with children.

<sup>5</sup> Stephen M. Corey, *Action Research To Improve School Practices*. New York: Bureau of Publications, Teachers College, Columbia University, 1953.

Since many of the problems to be attacked through action research involve the efforts of more than one person, co-operative efforts become an important but not unique part of this approach. Thus the increased competency of teachers to work co-operatively to solve their problems through scientific procedures is the basis upon which the action-research approach makes its contribution to the problem of continued educational improvement. Unfortunately, action-research activities are usually limited to a small portion of an educational program and to relatively few persons.

Action-research programs, like other approaches to curriculum improvement, lack a theory of curriculum to relate the contribution made by the study of specific problems to the total program and to indicate the need for the related and necessary studies which could insure improvement along a broad front. It is true that an action-research program has an inherent safeguard on this point if each problem studied is followed through and its consequences for educational improvement are thoroughly exploited.

A major problem of this approach is the common one of teacher security and skill in doing research on educational problems. Action research takes time; teachers are not experienced and skilled in logical processes; and research techniques of gathering and analyzing data and many of the methods necessary for dealing with emergent ongoing problems still need to be

developed. Problems of instruction and curriculum are perhaps the most difficult to attack by research. In addition to the problem of data collection and analysis, there is, in most if not all action-research projects, the problem of making judgments on the basis of sets of educational values and philosophic positions not necessarily a part of the project or of its data. This problem, however, is not restricted to the action-research approach. Any attempt to modify educational practice will always demand that a teacher or staff consider the need for value judgments at some point in the improvement process.

#### IMPLICATIONS FOR IN-SERVICE EDUCATION

An examination of these five approaches to educational improvement suggests the following conclusions.

1. All these approaches have emphasized important and necessary components of instruction and curriculum—objectives, subject areas, children, instructional situations, and the scientific method. Yet each approach suffers from the absence of the others. Does this mean that any adequate attempt to help teachers improve their instructional practice should include many, if not all, of the important aspects indicated above? Do we need to seek multiple and related approaches to curriculum improvement rather than the one golden road to the good life?

2. The advantages and disadvantages of these various approaches seem

to be determined by the extent to which the action points of teacher and staff effort are directly and necessarily a part of the teaching and instructional situation. Does this suggest that any adequate attempt to help teachers improve their instructional position should use an organizing center which is intimately a part of their teaching activities, is comprehensive enough to include all the necessary components of instruction and curriculum, and has the kind of continuity which would insure a personal and educational future?

The organizing centers for programs of instructional improvement apparently should have the following characteristics for teachers:

- a) *A sense of significance.*—The teachers must feel that the project being worked on will make some desirable difference in their important educational responsibilities. Generally, the child, learning episodes, and the problem for action research provide this sense of importance for teachers.
- b) *The quality of accessibility.*—Teachers must feel that the avenues to, and the tools for working on, the organizing center are available to them. They must feel that their present experience and abilities will enable them to make a successful start. Approaches involving the child, a subject area, and a learning episode have this quality of high immediate accessibility.

c) *An adequate breadth or scope.*—The organizing center must be comprehensive enough to include (1) many, if not most, of the important components of curriculum and (2) a sufficient range of activities for the members of the group who are to work on a project. A good organizing center must provide many degrees of freedom and responsibility for teacher participation and application. All five approaches, if properly utilized, have the potentiality for meeting this characteristic.

d) *A capacity for organizing and relating.*—The organizing center for an in-service program must have the capacity for doing just that. Objectives and a subject area as approaches have less of the organizing characteristic than do child study, the learning episode, and the problem selected for action research because the activities and the staff work important in their development cannot be easily tied to them.

e) *A capacity for development.*—The organizing center must have the capacity for going somewhere—for appropriate extensions in time, in ideas, in action, and in relationships. It must have this quality of continuity at a high level. All the approaches studied have the potential for meeting this characteristic if appropriate problems or aspects are selected for teacher or staff action. Again the child, learning episodes, and research prob-

lems have higher potentiality than the others for this developmental characteristic of a good organizing center.

3. The value of any approach to instructional improvement is enhanced when the important intellectual and social processes of learning and development are necessary and continuous parts of staff activities and work. Among these intellectual and social processes, the scientific method and the essentials of group co-operative work stand very high as important components of any effort to improve the competency of teachers and staff to make desirable changes in the educational program for which they are responsible.

4. Examination of these five approaches to school improvement has revealed the common lack of effective means for decision-making. Notably absent is a framework of values or value referents which would be useful in relating the persistent problem of curriculum and instruction to the bases upon which decisions about them could be made. Programs designed to improve educational activities, besides needing effective organizing centers, are in still greater need of a framework for thinking about, and relating on some meaningful basis, the important components of those programs. Programs of in-service education, like programs of curriculum development, need a comprehensive theory of curriculum to give them perspective and direction.

# WHAT STUDENTS THINK OF INTEGRATED CURRICULAR PRACTICES IN HIGH-SCHOOL ENGLISH AND SOCIAL STUDIES

ARTHUR H. MENNES

*Central High School, Sheboygan, Wisconsin*



MANY ATTEMPTS have been made to change the organization and pattern of classroom instruction on the secondary-school level. In recent years the most frequent type of experimentation in reorganization has been the change from the single-period, separate-subject organization to the double-period, integrated-course organization.

## DESIGN OF THIS STUDY

This study was limited to three high schools in Wisconsin, namely, Sheboygan Central, Sheboygan North, and Neenah high schools. The investigation included 436 students in sixteen tenth-grade classes. Each student in the integrated class was matched with a student in the regular tenth-grade curriculum. The criteria for matching were sex, intelligence, chronological age, reading level, and socioeconomic background. The study is based on data for the school years 1947-48, 1948-49, and 1949-50.

Teachers and administrators in these three high schools expressed a willingness to experiment with a few classes, using a double period in which English and world history would be in-

tegrated or unified. The two subjects would be appropriately correlated, and their relations would be made an integrated part of the classroom instruction. This conception would give special emphasis to interests, meanings, and relations involved. In many areas the topics would correlate into broader units, such as democracy, international relations, personality traits, study of self, occupations, religion, and the like.

The teachers agreed to plan the classroom activities with the students. The classes were to be organized so that they would function chiefly through group action. The role of the teacher in teacher-student planning was to be that of a group leader, assisting the students to reach their goals. In this experiment, teachers taught alone; they taught paired as a team for a double period; or they used the crisscross arrangement of having classes scheduled so that the two teachers exchanged classes.

## CHARACTERISTICS OF CONVENTIONAL AND INTEGRATED CLASSES

Although some teachers of the conventional classes used many of the



practices of the unified course, in general the characteristics of the conventional classes were as follows:

1. The classroom provided a restricted form of experience based on assignments in textbooks.

2. Instruction was in separate subjects, namely, English and world history, a class in each subject meeting for a single period.

3. There was a set course of study to be followed.

4. The primary objective of the classroom instruction was the learning of the content and skills of each subject.

The teachers of the integrated classes volunteered to experiment with the following characteristics and objectives:

1. To unify the subject matter:

- a) By scheduling two successive class periods. Thus provision was made to use larger patterns of instruction, with wider scope and longer time blocks.
- b) By correlating and fusing English and world history.
- c) By using a wide variety of materials.
- d) By recognizing the basic social, economic, and political problems of the world today.
- e) By developing an appreciation of historical knowledge and English skills in everyday living.
- f) By teaching the basic tenets of democracy.

2. To stress individual and group guidance:

- a) By helping students, at every opportunity, to accept social as well as personal responsibility.
- b) By studying each student's record in relation to his own characteristics and growth.
- c) By using every means possible to help the student evaluate himself.
- d) By helping students to work and get

along with, and to be concerned about the welfare of, other persons.

- e) By promoting physical and mental health.
  - f) By using every opportunity to develop in the student a broad pattern of interests and appreciations for the things worth while, including reading widely, participating in the activities of the school, dances, informal discussions, committee work, and the like.
  - g) By helping the student, through guidance, to follow a vocation for which he is best suited.
3. To place emphasis on student-teacher planning in the classroom:
- a) By using a democratic class organization, so that students function chiefly through group activities.
  - b) By using every opportunity for students to plan with the teacher concerning purposes, activities, procedures for research and study, and planning for the general conduct of the class.
4. To develop the ability to think critically:
- a) By teaching students correct procedure in interpretation of data.
  - b) By teaching them logical argumentation and recognition of fallacies in the arguments of others.
  - c) By teaching students how to make sound generalizations.
5. To develop good work habits and study skills:
- a) By teaching students the wise use of library facilities.
  - b) By teaching them how to use books efficiently.
  - c) By teaching students how to read newspapers and books with discrimination.
  - d) By teaching students to use all the resources possible to gain reliable information.
  - e) By teaching them discrimination in use of audio-visual aids, including movies, radio, and television.

#### ACHIEVEMENT IN TWO TYPES OF CLASSES

A series of achievement tests was administered in the fall and again in the spring, and comparison was made of the results. A pilot study was first conducted at Central High School. The following year, achievement of the unified classes in Central, North, and Neenah high schools was compared with achievement of the traditional classes in English, world history, social usage, critical-mindedness, school adjustment, information about the library, social skills, and reading.

On the whole, it may be inferred from the achievement-test results reported elsewhere<sup>1</sup> that students enrolled in the unified classes compare favorably in fundamental skills and knowledges with the students in the traditional classes. Students in the experimental classes gained more than those in the conventional classes in the objectives measured by tests in English, world history, social usage, critical-mindedness, school adjustment, information about the library, and in skills measured by Wrightstone's Social Studies Abilities Test and by reading tests.

#### STUDENT OPINION OF THE UNIFIED CLASSES

How do the students feel about the unified course organization one, two, and three years after taking this

<sup>1</sup> Arthur H. Mennes, "The Effectiveness of Multiple-Period Curricular Practices in High School English and Social Studies," *Journal of Experimental Education* (forthcoming).

course? A questionnaire was designed to discover the students' opinions about the integrated course. The questionnaire was prefaced with these statements:

Will you check and answer the items in this questionnaire? Feel free to express your honest opinions. Your answers will help to determine whether we should continue with this experiment.

Questionnaires were mailed or administered to 258 students in, and graduates of, the three high schools conducting the experiment. One group consisted of eleventh-grade students; another, of twelfth-grade students; and a third group consisted of graduates who had been out of school one year. These students had been members of the integrated classes in their Sophomore year in high school (Grade X).

The average return of questionnaires from the three schools was 92 per cent. The 8 per cent loss was due to the fact that students had moved out of town and a few graduates could not be located. It is interesting to note that some of the graduates were attending schools of higher learning, others were in military service, and 70 per cent were employed in their home communities.

*Procedures, activities, and educational outcomes.*—From the completed questionnaires came a variety of information, including informal comments and appended notations. In organizing the data for presentation, the writer felt that some broad areas or problems of the integrated course

should be studied. The questionnaire was constructed to cover the procedures, activities, and educational outcomes of the unified classes, in addition to other areas. Here the students were asked six questions:

1. In general, were you satisfied or dissatisfied with the integrated classes in English and world history?

5. Have you had as many opportunities in the integrated classes as in the conventional class to participate in committee work?

6. Were English and history more meaningful as result of correlation?

The students' responses to these six questions are presented in Table 1. If an average of the students' responses to the questions on procedures, activi-

TABLE 1  
PREFERENCE OF CORE AND CONVENTIONAL CLASSES BY 237 HIGH-SCHOOL STUDENTS AND RECENT GRADUATES\*

ITEM	STUDENTS PREFERRING CORE MORE		STUDENTS PREFERRING CORE SAME		STUDENTS PREFERRING CORE LESS	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
1. Integrated classes in English and world history vs. conventional classes.....	197	83.1	34	14.4	6	2.5
2. Satisfaction with activities.....	229	96.6	4	1.7	4	1.7
3. Opportunities for development of individual skills.....	224	94.5	12	5.1	1	.4
4. Opportunity of planning classwork....	229	96.6	8	3.4	.....	.....
5. Opportunity to participate in committee work.....	221	93.2	16	6.8	.....	.....
6. Making English and history more meaningful.....	190	80.2	42	17.7	5	2.1
7. Encouragement to participate in school activities and welfare in the school....	161	67.9	74	31.2	2	.8
8. Carrying out objectives.....	197	83.1	40	16.9	.....	.....
9. Choice between integrated and regular classes.....	218	92.0	.....	.....	19	8.0

\* The average return of questionnaires from the three schools was 92 per cent. There were 258 questionnaires and 237 responses.

2. In general, were you satisfied or dissatisfied with the activities used in the integrated classes (group planning, panels, field trips, etc.)?

3. In regard to opportunities for development of individual skills, such as speaking to the group, use of library, reading of newspapers, did you receive more help, about the same, or less help in the integrated classes?

4. In regard to opportunity of planning your class work, did you receive more help, the same, or less help in the integrated classes?

ties, and educational outcomes were taken, 90.7 per cent of the students responding would be found to have more satisfaction with integrated classes than with the conventional classes; 8.2 per cent, the same satisfaction; and 1.1 per cent, less satisfaction.

The following statements, listed in order of frequency, summarize the informal comments made by students on

the questionnaire concerning classroom practices they thought desirable in the integrated classes:

The variety of activities, including field trips and panels (mentioned more than 200 times)

The group activities, including group planning, committee meetings, group thinking, and co-operation (mentioned more than 200 times)

The democratic atmosphere of the class—chances to express one's self and to develop leadership

The correlation of subject matter, which made work more interesting and meaningful

Knowing the teachers and fellow-students better, and the friendly feeling that this increased intimacy created

The opportunities of speaking to a group and of discussing problems

The study of current problems, and the use made of the library

The longer period of time in which to solve problems

Some typical comments made by the students concerning their preference for the core class follow:

Places more responsibility on the individual and makes him ready to accept responsibility in later life.

You get a chance to discuss your opinions after careful study of both sides of the problem.

Planning class work in advance gave me a chance to plan my schedule.

Most of the students were more willing to do the work than in the ordinary class because it was outlined by their fellow-students.

Develops speaking ability and use of grammar instead of just learning rules.

Larger projects can be carried on because of the longer period.

The main point in favor of the integrated classes is the voice that the student has in running the class. In my own case I was aware of the part we had in planning our studies, and I enjoyed the over-all freedom we had which was not present in other classes.

Having the same people for two classes brought everyone closer together and it was just like talking to friends, yet it was before a group of people.

The reason for enjoying the integrated classes is that I like a lot of activity. When you have to stick to the book for your discussions, it gets boring. In panels we chose subjects where we could compare yesterday with problems of today. In the case of field trips, you learn more by seeing than by hearing or reading about it. I found I did not tire as quickly of the subject as I did in the regular classroom.

I have never enjoyed a class in English or history as much as I enjoyed the integrated classes.

*Encouragement of participation in school activities.*—Students were asked: "To what extent have you been encouraged by experiences in the integrated classes to participate in school activities and the welfare of the school?" Item 7 in Table 1 shows that more than two-thirds felt that being in an integrated class helped them "more" to participate in school activities and the welfare of the school.

*Objectives of integrated and of conventional classes.*—When the students were asked to rate a list of objectives for the integrated class as compared with their regular class experiences, 197 of the students, or 83.1 per cent (Item 8, Table 1), indicated that the list of objectives were practiced "far

more" or "more" in the integrated classes, while 40 students, or 16.9 per cent, stated that they were practiced to the same extent.

*Students' choice between integrated and conventional classes.*—Students responded to the question, "If you had a choice to do it over again, would you choose English and world history in an integrated class or a regular class situation?" The last item in Table 1 shows that 92 per cent of the students from the three schools would choose the integrated classes rather than regular classes and only 8 per cent would choose a regular class.

Among the reasons for choosing the integrated class instead of the conventional classes, students mentioned the following:

The correlation of subjects made the work more interesting and meaningful.

There were more opportunities for learning, and they felt that they learned more.

There was more co-operation among students and between students and teachers.

The experience in planning was beneficial.

There was better relation between students and teachers and a friendlier atmosphere, more guidance, and the feeling that the work was easier to understand and more enjoyable when worked out democratically.

Among the reasons for choosing the traditional class were the following criticisms:

The integrated classes were too long.

The same people were in the room two periods.

Some of the pupils did not co-operate.

There was not enough grammar.

Some of the informal comments favoring the integrated class were the following:

It was not only a change from the other classes I attended, but you actually felt as if you were a part of the class, much more so than you did in a regular class. Also it seemed that the class was more informal, and therefore many things other than regular class work were talked about by the students and teachers.

It was a lot of fun, and yet I think I learned much more than I would have in regular classes. I think it is an excellent idea to have English and world history together. It helped me to become more at ease and less self-conscious. I think all Sophomores should be in the integrated classes. I thought we had an advantage over the rest of the classes.

The integrated class developed some traits in me that I will have when I get out of high school; these traits will be very useful to me in getting a job.

I believe that it was a good foundation for the remaining years in high school.

I would choose the integrated class because it gave all the pupils a chance to work together. We divided our class into four different committees and changed committees every six weeks. By doing this, each student had an opportunity to plan the work of the class, take care of the bulletin boards, or help arrange for field trips. Each student had an opportunity to become an officer. We learned to accept responsibility because the burden of running the class rested on us, and we knew that if it was to be done efficiently, we must do a good job.

Through use of community resources, the program was most satisfactory and commendable.

I didn't really appreciate the integrated class when I had it, but now I see the effect it



had and I am glad I had the opportunity to have been in it. It was hard work, which made me (at the time I was in the integrated class) want to be in a traditional class. But if I would choose again, I would choose the integrated class again because, even if it was harder work, it helped me individually to make me more independent and helped me in vocational choice.

I feel that I learned a great deal more as to how literature developed along with history. I remember a great deal that I learned in those classes, while in some other subjects I remember a great deal less. Because of this, I felt that the class benefited me a great deal.

Those who chose the traditional classes made such explanations as:

I like to change rooms and see different faces.

Too much time was wasted, and as a result I don't think I learned what I could in a regular class.

The class is drawn out. You sit in the same seat all year long. You see the same faces for two periods. I thought some of the essentials of English were slighted. By reading historical literature in connection with history, we used much of the time which normally would have been spent on grammar.

#### CONCLUSIONS AND IMPLICATIONS

Although student opinion is probably the least reliable kind of information collected, it nevertheless holds the most interest for most teachers. This is true because student opinions and reactions tell the faculty many things that they cannot get from other sources. In this study, both achievement tests and "opinionnaires" were used to get a broader view of the integrated class and its effect on boys and girls.

1. Opinions of students favor the

integrated course. Students base their opinions on the fact that the program and methods of the integrated class emphasize a closer relation between the school and community; show a greater concern over finding materials of instruction that are more meaningful; use broad fields rather than rigid academic subject matter; and seek to provide within the classroom a much greater amount of student-teacher planning and much more student participation and experience in democratic process and organization. Students claim that more attention is given to problems which are real and meaningful to them.

They also testify that the faculty-student relation in the integrated course is exceptionally good. They like the guidance services given them in the integrated class, including student-teacher conferences on individual progress and emphasis on the development of desirable personal characteristics, study of self, and the establishment of goals for better development. They are also pleased with the many opportunities for the development of individual skills and the encouragement given to participate in school activities and school welfare.

2. The present findings demonstrate the value of classroom practices that have been clearly focused on goals that are important to the student. From the students we gained an understanding of what they considered valuable outcomes of classroom instruction. We are coming to realize that students should have a part in evaluating as well as in planning.

## THE PROFESSIONAL PREPARATION OF JUNIOR HIGH SCHOOL TEACHERS

JAMES E. FRASIER

*Public Schools, Omaha, Nebraska*



A MOST DYNAMIC movement" were the words used by Koos<sup>1</sup> to describe the junior high school in American education. In spite of the strictures of critics of the junior high school and in spite of predictions that it would disappear as a separately organized segment of education, the trend toward reorganization continues. Evidently the junior high school, in some form or another, is here to stay. The task for educators is to make sure that the junior high school meets its challenge of providing the best education for early adolescent boys and girls. Certainly, intelligent choice of teacher personnel is an important part of that task.

### LACK OF SPECIAL PREPARATION

It is axiomatic that no school is stronger than its professional staff, and that the strength of the staff varies with the preparation of its members. Research into the amount and type of preparation that a junior high school teacher should have is lacking. Teacher-education institu-

tions have done little toward setting up programs for preparing junior high school teachers. In fact, the junior high school might well be described as "an orphan of education" or "a school without teachers." A study of college offerings reveals that teacher-education institutions appear to have forgotten the junior high school in their courses of study.

In an attempt to discover prevailing practices in the education of junior high school teachers, an analysis was made in 1950 and again in 1954 of the catalogues of sixty-five colleges and universities. The analyses were made on two bases. First, a check was made of the catalogues of seventeen leading colleges and universities from thirteen widely separated states. It was found, in 1950 and again in 1954, that not one of these seventeen schools offered a special curriculum for the preparation of junior high school teachers. Only three of the seventeen offered a single course designed for the preparation of these teachers. All the institutions, however, offered a multiplicity of special elementary-school courses and a number of courses designed for senior high school teachers.

<sup>1</sup> Leonard V. Koos, "Junior High School Reorganization after a Half-Century," *School Review*, LXI (October, November, and December, 1953), 393-99, 479-87, 527-40.

The second step of the analysis of catalogues was a check of forty-eight catalogues available from four states in the Midwest section of the United States. Again it was discovered that none of the colleges have a major in junior high school education and that all the courses offered in these institutions for the preparation of junior high school teachers total only ten.

It cannot be said that educators have failed to point out the need for programs designed to prepare teachers for the junior high school. As early as 1918 Davis<sup>2</sup> made a study of all three-year junior high schools in the North Central Association territory. He reported almost no effort on the part of teacher-training institutions to prepare teachers for the then new type of school. Again in 1927 the lack of special preparation for junior high school teaching was noted:

Undoubtedly the most important asset of any school is its corps of teachers. This is doubly true of the junior high school, since it is a departure in many respects from the traditional elementary and senior high school.<sup>3</sup>

Nor can it be said that interest in special preparation for junior high school teachers was limited to the early days of the junior high school movement. There have been any num-

ber of pleas for special junior high school preparation down to the present time. Yet Floyd<sup>4</sup> in 1932 and Koos<sup>5</sup> in 1943, as well as the current research, found no more activity in the field of junior high school teacher preparation than did Hall-Quest and his co-workers<sup>6</sup> in 1923.

#### DETERMINING DESIRABLE QUALIFICATIONS

As is too often the case, a consensus among leaders that something should be done is met with apathy in the realm of practice. Although it is usually agreed that a junior high school teacher needs special preparation, no pattern of courses or list of experiences has general acceptance. It seemed there was a need to determine what professional training best prepares a teacher to be a member of a junior high school staff. Therefore a study was made to discover whether a list of qualifications could be developed to apply to teachers desiring to teach in the junior high school.

Seventeen writings by acknowledged leaders in the field of junior high school education were analyzed to discover the qualifications that these

<sup>4</sup> Oliver R. Floyd, *The Preparation of Junior High School Teachers*. United States Office of Education Bulletin No. 20, 1932.

<sup>5</sup> Leonard V. Koos, "The Superiority of the Four-Year Junior High School," *School Review*, LI (September, 1943), 397-407.

<sup>6</sup> Alfred P. Hall-Quest, H. H. Foster, W. L. Richardson, and Carrie Hooper, "The Training of Junior High School Teachers," *Educational Administration and Supervision*, IX (May, 1923), 257-58.

<sup>2</sup> C. O. Davis, "Junior High Schools in the North Central Association Territory, 1917-18," *School Review*, XXVI (May, 1918), 324-36.

<sup>3</sup> *The Junior High School Curriculum*, p. 53. Fifth Yearbook of the Department of Superintendence. Washington: Department of Superintendence of the National Education Association, 1927.

leaders considered of primary importance in the education of a junior high school teacher. Thirty-nine separate qualifications were found. The qualifications divided naturally into three categories: (1) those pertaining to amount of preparation, (2) those per-

terts; seventeen of the thirty-nine were given by two-thirds or more. Only three of the qualifications were mentioned by only one writer. Further proof of apparent unanimity is seen in the fact that, although a total of twenty-four persons were associated with

TABLE 1  
TWENTY QUALIFICATIONS IN JUNIOR HIGH SCHOOL TEACHER PREPARATION GIVEN  
HIGHEST RATINGS BY 72 SUPERINTENDENTS AND 162 PRINCIPALS

QUALIFICATION	TOTAL WEIGHTED VALUE	FREQUENCY WITH WHICH IMPORTANCE RATED AS—		
		Extreme	Average	Little or None
1. Four years or more of college education.....	686	219	14	1
2. A course in the psychology of adolescence.....	678	211	21	3
3. A course in child growth and development.....	677	203	34	0
4. A thorough foundation in English.....	667	200	33	1
5. Direct experiences with adolescent children.....	659	185	51	2
6. At least eighteen semester hours of education (approx- imately).....	640	185	41	3
7. Practice teaching on the junior high school level.....	636	172	58	4
8. An especially large fund of general knowledge.....	625	166	63	1
9. A course in educational guidance.....	611	153	73	6
10. A course on junior high school problems, such as adminis- tration and curriculum.....	602	152	65	16
11. A course on the curriculum of the junior high school....	587	134	89	7
12. A course in elementary education.....	583	126	95	15
13. A thorough foundation in social studies.....	574	126	96	4
14. A course in psychology of learning.....	572	144	64	12
15. A course in secondary education.....	561	123	91	10
16. A course in general educational psychology.....	551	110	102	17
17. Broad preparation in several fields in lieu of a major- minor sequence.....	539	122	74	25
18. A course in general sociology.....	488	54	145	36
19. A course in extra-curriculum activities.....	429	69	101	20
20. A course in making provision for individual differences..	384	23	111	93

taining to specific courses, and (3) those pertaining to general preparation.

In all cases the qualifications chosen referred specifically to junior high school teachers. A large degree of unanimity apparently exists among the authorities in this field. Five of the qualifications were listed by all the ex-

the writings analyzed, only thirty-nine different qualifications were found.

Following this analysis, an attempt was made to discover whether the administrative officers of public schools tended to agree with the writers. A questionnaire listing the thirty-nine qualifications was sent to 100 superintendents and 200 principals of junior

high schools. Respondents to the questionnaire were asked to rate each of the thirty-nine qualifications as (1) "Of extreme importance," (2) "Of average importance," or (3) "Of little or no importance."

Completely usable replies were returned by 72 of the 100 superintendents and 162 of the 200 principals, from 47 states and the District of Columbia. The subject apparently is one of interest to school administrators.

A high degree of acceptance by the school administrators of the listed qualifications was registered. More than 83 per cent of both the superintendents and the principals canvassed felt that all the qualifications were of average or of extreme importance in the preparation of junior high school teachers. Approximately 47 per cent of both superintendents and principals stated that all items were of extreme or of average importance for a teacher in junior high school.

For one of the more rewarding analyses, a weighted value was given to the responses of the administrators. Three points were given for each "Of extreme importance" rating, two for each "Of average importance," and one for each "Of little or no importance" rating. The twenty items which proved to be the most desired

on the basis of their weighted value are shown in Table 1.

This list of qualifications may be considered the minimum preparation for a person who teaches in a junior high school, since they were rated as extremely important by seventeen leaders in the field of junior high school education and by a representative sample of superintendents and principals. The list of qualifications does not represent the entire gamut of experiences which a junior high school teacher should have, nor will the teacher who has all these qualifications be assured of success as a teacher of early adolescent pupils. It may safely be assumed, however, that the teacher who has had the experiences listed in the table should be better prepared for junior high school teaching than one who has not.

It is unfortunate that most teacher-education institutions do not have an organized program for the preparation of junior high school teachers. Until such time as they do, teachers in training will have to work through the existing curriculums to get the preparation needed, and administrators will have to make an especially careful study of college transcripts when choosing persons who are to teach in this "most dynamic school."



## SELECTED REFERENCES ON HIGHER EDUCATION

ALLAN O. PFINISTER AND MANNING M. PATTILLO

*University of Chicago*



THIS LIST of references is a selection from materials on higher education that have come to the attention of the compilers between July 1, 1953, and June 30, 1954. Institutional histories, annual reports, yearbooks, and proceedings of associations regularly devoted to the problems of colleges and universities have not been included.

The compilers have tried to select from the large amount of published material those items that they believe will be most helpful to informed practitioners in the field of higher education. Readers who have used this list of references in the past will observe that the list has been made more selective. The compilers have taken pains to include only books and articles which, in their judgment, deal with problems of enduring interest.

Last year the compilers mentioned in their prefatory remarks that higher education was undergoing a serious and fundamental re-examination and that widespread attention was being given to the philosophic basis of college and university programs. This year's articles and books reflect the same concerns: moral and spiritual values, intellectual freedom and re-

sponsibility, and the justification and financing of higher education. The reader will note that the following list of references includes a number of items on the place of religion in curriculum and teaching. To some extent the emphasis on this theme in the selection of the references may stem from the compilers' own beliefs that this is an important subject, but it should also be observed that a religious orientation is characteristic of much of the current writing in the field of higher education. This emphasis is perhaps inherent in the rigorous kind of reappraisal that is now going on in academic circles.

730. BAIN, READ. "How Liberal is the Liberal Arts College?" *American Association of University Professors Bulletin*, XXXIX (Winter, 1953-54), 624-31.

Contents that liberal arts colleges today fail to liberate, to "open the windows of the mind." Liberal arts colleges have multiplied courses and activities instead of concentrating on the primary responsibility of providing a liberating higher education and proper preparation for all subsequent professional education. Argues that the proper function of higher education is to prepare qualified people for professional practice of the arts and sciences and for creating new knowledge in these fields and suggests a program to attain these objectives.

731. BENEZET, LOUIS T. "College Admissions and the Third Dimension," *Association of American Colleges Bulletin*, XXXIX (October, 1953), 397-408.

Discusses current admissions policies and upholds the thesis that it is the business of our colleges to select those students who can most benefit from college training. Maintains that the influence of the high-school counselor on the student and the counselor's opinion in regard to continuation of education constitute the "third dimension" of the selective process. States that the opinion of a good high-school counselor is more significant in determining admission to college than class standing or paper-and-pencil tests. Concludes with questions and suggestions on the basic purposes of college.

732. BURNS, NORMAN. "The Role of Accrediting in the Improvement of Education," *Junior College Journal*, XXIV (May, 1954), 545-51.

States that the basic purpose of accrediting is the improvement of education. Reviews early accrediting procedures and points to a shift in emphasis. Tells how, in recent years, regional associations have encouraged experimentation in education. Outlines the new approach of the North Central Association in its plans to stimulate staff studies and develop consultant services.

733. BUSH, VANNEVAR. "Scientific Motivation," *Proceedings of the American Philosophical Society*, XCVIII (August 16, 1954), 225-32.

Considers the values that may properly motivate scientific research. Concludes that such values cannot logically be derived from science itself (since science is ethically neutral) and that either a religious faith or "the simple faith that it is man's mission to learn to understand" provides the best impetus to scientific progress. Includes a review of some of the fundamental questions with which present-day scientific inquiry is concerned, such as

the origin and development of the physical universe.

734. CALKINS, ROBERT D., RICH, WILMER SHIELDS, and TUNKS, L. K. *The Impact of Foundations on Higher Education*. Chicago: Commission on Colleges and Universities, North Central Association of Colleges and Secondary Schools (5835 Kimbark Avenue), 1954. Pp. iv+28.

Contains addresses by a former foundation official, a college fund-raising consultant, and a legal specialist on non-profit corporations on the history and role of foundations, their areas of interest, and the legal framework within which foundations operate. Weighs the criticisms of foundations, as reflected in the thinking of academic and political observers, concluding that, in general, foundations make an essential contribution to higher education.

735. COMPTON, WILSON M. "The Liberal Arts College and the Promise of American Life," *Association of American Colleges Bulletin*, XL (March, 1954), 90-100.

Describes the organization and work of the Council for Financial Aid to Education in stimulating business to contribute to the support of higher education. Outlines the basic policies of the council and makes suggestions for organizing programs to gain the support of business. Notes the recent change in attitude of business from unconcern to active support of higher education. Urges colleges to clarify their purposes in order to merit public confidence and support.

736. DIMOCK, MARSHALL E. "The Current Administrative Challenge in Higher Education," *Journal of Higher Education*, XXV (June, 1954), 307-12, 340.

States that higher education, faced with rising costs, will have to improve the use of its resources through better administrative methods. Urges, as an alternative to staff expansion, the fullest utilization of present

faculty members in planning educational objectives, philosophies, and curriculums. Recommends wider application of new knowledge in human relations, motivation, and co-operation.

737. DUPONT, GERALD E. "Toward an Integrated Curriculum," *College and University*, XXIX (January, 1954), 197-214.

Considers factors leading to disintegration of the curriculum and proliferation of courses and degrees in liberal arts colleges. Describes the efforts of the faculty at St. Michael's College, Winooski, Vermont, to remedy these conditions through a thoroughly revised academic program. Suggests general principles underlying this program.

738. GRISWOLD, ALFRED WHITNEY. *Essays on Education*. New Haven: Yale University Press, 1954. Pp. xiv+164.

A collection of essays, most of them delivered as addresses on various academic occasions, that were written during the author's first three years as president of Yale University. Covers a range of subjects, with main emphases on the justification of higher education, the place of the liberal arts, the problems of financing, and the problems of enrolment.

739. HAVIGHURST, ROBERT J. "The Governing of the University," *School and Society*, LXXXIX (March 20, 1954), 81-86.

Sees the shift in financial support as a "crisis" facing American universities. Economic inflation has reduced income from endowments and forced private universities to look either to federal funds or to contributions from private industry. The author recognizes that, under the present conditions, financial aid in substantial amounts is more likely to be forthcoming from industry than from government, but he is fearful of the possible effects of the growing interest of American businessmen in higher education.

740. HILTNER, SEWARD; WIRTZ, W. WIL-LARD; GRINTER, L. E.; and GREEN, MELVIN. "The Essentials of Professional Education: A Journal Symposium," *Journal of Higher Education*, XXV (May, 1954), 245-62, 286.

States that professional education faces the problem of reconciling the *apparently* mutually exclusive goals of the specialist and the craftsman. Suggests that the science and the craft goals can be brought together in the type of education that trains the student to operate from basic principles and through technical means, to work in some direct way for human welfare, to act responsibly, and to work in some ways as a representative of a professional group.

741. HOPKINS, JOSEPH M. "Good News for Church Colleges," *Christian Century*, LXXI (April 21, 1954), 490-91.

Reports the findings of a study of the factors affecting financial support of church colleges. Includes data on amount of support in particular denominations and for particular institutions, showing an upward trend in church-giving to higher education. Concludes that the most important factor determining such support is the quality of an institution's religious program, judged in the light of the needs and purposes of the church constituency.

742. HUTCHINS, ROBERT M. *The Conflict in Education in a Democratic Society*. New York: Harper & Bros., 1953. Pp. x+114.

Examines and rejects what are, in the opinion of the author, the four prevailing theories of education; the doctrine of adaptation or adjustment; the doctrine of immediate needs or of the *ad hoc*; the doctrine of social reform; and the doctrine that we need no doctrine. Urges universal liberal education to develop the powers of understanding and judgment in preference to the present "infinite, incoherent proliferation of courses largely vocational in aim." Proposes the establishment of a new kind of intellectual institution composed of

men who would carry on a continuous dialogue on the basic philosophical issues, a function that cannot be discharged by the universities because of their empiricism, specialism, and positivism.

743. KNIGHT, DOUGLAS. "The Colleges and the Rejection of Intellect," *Association of American Colleges Bulletin*, XL (May, 1954), 220-26.

Analyzes the popular doubt that the values and achievements which liberal arts colleges stand for have any real meaning or importance. Because the author feels that both society and the universities are confused about standards of value, he proposes a new definition of "equal opportunity." In conclusion he urges recognition of the "indivisible relationship between rational and nonrational kinds of perception."

744. MCNIFF, PHILIP J., and MEMBERS OF THE LIBRARY STAFF. *Catalogue of the Lamont Library, Harvard University*. Cambridge, Massachusetts: Harvard University Press, 1953. Pp. x+562.

Contains a classified list of the 39,000 titles in the working collection of books selected to serve the required and recommended course reading needs and the more general reading needs of Harvard undergraduates. Published under a grant from the Carnegie Corporation as an aid to other college libraries.

745. MARSDEN, MALCOLM. "General Education: Compromise between Transcendentalism and Pragmatism," *Journal of General Education*, VII (July, 1953), 228-39.

Analyzes the concept of general education in terms of five characteristics outlined by the Committee on Cooperative Study in General Education: opposition to specialization and vocationalism, provision for common knowledge and understanding, integration of subject matters, instruction in clear and logical thinking, and involvement in current problems. Describes the thought of Charles Eliot Norton, former

Harvard professor, and of John Dewey as illustrative of transcendentalism and pragmatism, respectively. Shows that, while operating from different metaphysical assumptions, transcendentalism and pragmatism meet on a common ground in four of the five characteristics of general education. Suggests that general education is providing a point of conversation for the two opposed schools of thought.

746. MONTROSE, J. L. "The Supreme Court of the U.S. and Academic Freedom," *Universities Quarterly*, VII (August, 1953), 348-53.

An analysis by a European scholar of two Supreme Court decisions on academic freedom. One decision upheld the constitutionality of a New York state law on loyalty, and in the other an Oklahoma statute was declared unconstitutional. The author feels that these decisions show a genuine concern for freedom in the United States.

747. MORRILL, J. L. "The Federal Legislative Outlook," *Educational Record*, XXXV (January, 1954), 18-24.

The chairman of the American Council on Education Committee on Relationships of Higher Education to the Federal Government sees in recent legislative activity "a trend in the direction of retrenchment and redirection, of investigation and intervention." The author believes that the investigative and interventionist trend is still somewhat tentative and subject to reconsideration. Recognizes that government has become increasingly involved in higher education.

748. MOULTON, PHILLIPS P. "Is Religion Too Controversial?" *American Association of University Professors Bulletin*, XXXIX (Autumn, 1953), 398-403.

Rejects the prevalent view that religion is too controversial for inclusion in the curriculum by pointing out that a number of widely accepted academic fields deal with matters of a similarly controversial nature. Maintains that the value of reli-

gion as a field of study is demonstrated in actual practice by the increasing number of public and private institutions now offering courses in this field.

749. NEWBURN, H. K. "The Organization and Administration of Universities in France, Italy, and Great Britain," *Educational Record*, XXXIV (July, 1953), 245-74.

Reports data secured in a program of visitation of twenty-nine European universities during the first five months of 1953 under a grant from the Carnegie Corporation. Summarizes the current status of higher education in Europe by giving a country-by-country analysis of the organization, the students, the professors, and the administration of the institutions studied.

750. RAUCH, S. E. "Cooperative Programs of Study with Liberal Arts Colleges and Universities," *Educational Record*, XXXV (April, 1954), 141-44.

Discusses courses of study which allow undergraduate students to experience the separate environments of a liberal arts college and a university professional school—a co-operative program that has emerged as a new pattern in higher education during the second quarter of the century. Describes the program at Massachusetts Institute of Technology (a clear example of the development), where the student spends three years in a liberal arts college, followed by two years of technological study in the Institute, and receives the Bachelor's degrees from both institutions.

751. REISMAN, DAVID. "Some Observations on Intellectual Freedom," *American Scholar*, XXIII (Winter, 1953-54), 9-25.

Discusses the position of intellectuals in the present controversy over subversion, loyalty, and investigating committees. Expresses concern over the tendency of the community of intellectuals to enforce

on its members a conformity of its own which is opposed to the popular pressure to conform. Suggests that some of the criticism of intellectuals reflects the non-intellectual's fear of the growing influence of intellectuals, similar, for example, to the common man's fear of bankers and lawyers.

752. RIGGS, HEATH K. "Inter-State Cooperation in Education," *Phi Delta Kappan*, XXXV (November, 1953), 97-100.

Surveys activities of the Southern Regional Education Board four years after its establishment. Outlines the extent of the "Contract Programs" in medicine, dentistry, veterinary medicine, and social work. Evaluates the program to date and suggests possible patterns of future development.

753. "The Role of College and University Trustees: A Panel Discussion Sponsored by the Commission on Colleges and Universities at Chicago, March 25, 1953," *North Central Association Quarterly*, XXVIII (January, 1954), 290-97.

Reports the views of a trustee, a dean, a professor, and two presidents on the proper functions of governing boards. Among the topics considered are faculty freedom of expression, the relation of board and presidential authority, the place of faculties in policy determination, and the public relations responsibilities of boards. Presents long excerpts from the individual presentations of the discussants.

754. RUSSELL, JOHN DALE. "Current Problems in Higher Education," *College and University*, XXIX (July, 1954), 486-515.

Presents problems devolving on higher education in the foreseeable future under the following headings: student enrolment, faculty and other instructional staff, curriculum organization and development, student personnel services, research and public services, physical plant facilities,



finance, institutional administrative organization, and inter-institutional relations. After analyzing the issue under each heading, the author suggests the implications for future planning in higher education.

755. SCHMIDT, GEORGE PAUL. "Colleges in Ferment," *American Historical Review*, LIX (October, 1953), 19-42.

Traces the history of American higher education, chiefly in the nineteenth century, with particular attention to the curricular impact of Darwinism and the growth of the scientific disciplines. Although the author seems to suggest that the successive changes in higher education, taken singly, were improvements, he concludes with a general question as to whether expansion has done irreparable damage to collegiate education.

756. STEVENS, DAVID H. *The Changing Humanities: An Appraisal of Old Values and New Uses*. New York: Harper & Bros., 1953. Pp. xvi+272.

Reviews developments in the humanities in American colleges and universities during the last few decades. Special chapters are devoted to languages, history, philosophy, and literature. The emphasis is on significant trends and major areas of interest rather than on a cataloguing of individual researches.

757. TEN HOOR, MARTEN. "Education for Privacy," *American Scholar*, XXIII (Winter, 1953-54), 27-42.

Suggests that training for self-improvement, that is, the improvement of the individual, is the first task of liberal education, rather than training for social improvement or leadership, since he who is not able to solve his own problems cannot properly lead or educate others. This "education for privacy" consists of "an understanding of the world, a vision of the good life, serenity of spirit, appreciation and practice of the fine arts." The author believes that too much emphasis has been placed on training for improving others and

not enough emphasis on the improvement of one's self through reflection and good reading.

758. THOMPSON, RONALD B. *Estimating College Age Population Trends, 1940-1970*. Report to the American Association of Collegiate Registrars and Admissions Officers. Columbus, Ohio: American Association of Collegiate Registrars and Admissions Officers (Ronald B. Thompson, President, % Ohio State University), 1954 (revised). Pp. vi+70.

Reports on an analysis of vital statistics from the year 1918 to 1952. Presents in tabular form an estimate of the number of college-age youth for the years 1940 to 1970, with detailed reports for each state and the District of Columbia.

759. WALSH, CHAD. *Campus Gods on Trial*. New York: Macmillan Co., 1953. Pp. xiv+138.

Analyzes and evaluates the faiths that are most influential on college and university campuses—materialism, relativism, scientism, humanitarianism, belief in progress, and Christianity. Particular attention is given to scientism and Christianity as the two most clearly opposed faiths at the present time. Scientism, as a philosophical or religious position, is distinguished from science as a method of studying certain kinds of phenomena. The emphasis throughout is on the impact of the various faiths on college students.

760. WELLEMeyer, J. F., and LERNER, PAULINE A. "Higher Education Faculty Requirements in the Humanities and the Social Sciences, 1952-1970," *School and Society*, LXXVIII (November 14, 1953), 145-52.

Examines current enrolment figures and predicted enrolment in institutions of higher education. In light of normal academic turnover and anticipated enrolment, suggests the number of faculty members that will be required in the humanities and the social sciences to 1970. Presents data

for planning the recruitment and training of future faculty members.

761. WELLS, HARRY L. *Higher Education Is Serious Business*. New York: Harper & Bros., 1953. Pp. xiv+238.

Relates university business management to the theory and practice of higher education. Includes discussions of educational administration, the student and his problems, personnel relationships, and management problems. Challenges present practices and proposes major innovations in educational approach. Written "within a business horizon."

762. WILSON, ROBERT E. "A Businessman Looks at Education," *Association of American Colleges Bulletin*, XXXIX (December, 1953), 537-47.

The chairman of the board of the Standard Oil Company (Indiana) suggests that busi-

ness, in its concern for freedom of enterprise, and higher education, in its concern for academic freedom, have a common interest. Shows that business wants from higher education not only competent technicians but also men of broad background trained in the liberal arts. Outlines the responsibilities of business in the support of private higher education.

763. WISE, JOHN. "Relativism and the University," *School and Society*, LXXVIII (November 28, 1953), 161-66.

Discusses the development of relativism and its implications for higher education. Submits the view that relativism destroys the fundamentals of truth without which education cannot proceed, thereby actually making an educational system philosophically impossible. The author holds that a university must have philosophy and theology or their substitutes.

## EDUCATIONAL WRITINGS



### REVIEWS AND BOOK NOTES

ARVIL S. BARR, ROBERT A. DAVIS, and PALMER O. JOHNSON, *Educational Research and Appraisal*. Philadelphia 7: J. B. Lippincott Company, 1953. Pp. viii+362. \$6.00.

Following an introductory chapter, the body of the book under review is divided into three rather distinctive, though not labeled, parts. Chapter ii, "Defining Educational Outcomes," chapter iii, "Quantification of Educational Data," and chapter iv, "Criteria of Measuring Instruments," establish the basis for the choice or development of data-collecting techniques. Chapter v, "Description and Appraisal of Status," chapter vi, "The Sampling Survey," and chapter vii, "Search for Interrelationships," describe some of the nonmathematical and less complex statistical methods of research and appraisal. Chapter viii, "Experimental Design," chapter ix, "The Problem of Prediction," and chapter x, "Correlational Analysis," introduce the various statistical techniques and interpretations implied by their titles. The final chapter, "Complex Developmental Studies," attempts to synthesize the various research techniques and approaches through consideration of their application in complex educational problems. Appendix A, contributed by Davis, provides some excellent hints on writing a thesis. Appendix B provides for each chapter a brief supplementary list of references. In general, the plan of the book strikes this reviewer as well conceived.

The three chapters by Davis cover in approximately 100 pages the problems of defining objectives; a multiplicity of measurement

and evaluation techniques; and the concepts of validity, reliability, objectivity, and discrimination. For students with prior work in tests and measurements, this is a good review, although somewhat repetitious even within the space of these pages. (For example, the remarks on pages 71 and 72 regarding the quantification of personality are repetitive of material on pages 32 and 33.)

A dilemma regarding the level of student competency is clearly indicated by the fact that, in chapter iii, Davis feels it necessary to carefully define *z*-scores, *T*-scores, and percentiles while later, in chapter iv, examples employing multiple-correlation coefficients are discussed without explanation. In chapter iv, also, the term "cross-validation" is introduced with no other acknowledgment of the term's obscurity to many readers than to place it in quotations. The failure even to give a reference at this point is to be contrasted with the use of unnecessary references at other points, such as the following: "Blankenship believes the wording of questions is no less important than appropriate sampling" (p. 108).

At some points in these chapters the impression is gained that Professor Davis has forgotten his student readers and is more concerned with warding off criticisms for omission of some idea. This tendency is reflected in the off-hand comment about the method of maximum likelihood (p. 115) and by the following sentences:

The split-half and the parallel-split methods are not applicable in the case of speed tests. Jackson has developed a measure of the sensitivity of a test. Hoyt has applied the analysis of

variance to the determination of test reliability (p. 116).

Barr's discussion of the problem of describing and appraising status in chapter v is well done. He points up nicely the differences between verbal and mathematical descriptions, using numerous well-chosen examples. Although using simple statistical concepts rather freely, Barr contents himself with recognizing in a footnote the probable lack of knowledge of some readers and suggesting to them two appropriate references. It is unfortunate that some such agreement was not reached by the writers and followed in the earlier chapters by Davis.

Barr's discussion of the search for interrelationships is also good, and again he uses many well-chosen illustrations. There is some repetition here of materials covered previously in chapter iii. Indeed, each of the chapters appears to have been produced independently and there is little interdependence and almost no back-reference. It is unfortunate that Barr saw fit to introduce the almost obsolete probable-error concept on page 195. The final chapter by Barr is an excellent attempt to fulfil in a short space the difficult task of demonstrating to students that major research projects involve the use of every weapon in the research arsenal. Perhaps the one difficulty that a teacher should keep in mind for the student reading these chapters is that the unsophisticated student may get so involved in a particular example as to fail to realize that it is only an illustration of a particular approach which may have many variations as applied to other problems.

Chapter vi, "The Sampling Survey," chapter viii, "Experimental Design," and chapter ix, "The Problem of Prediction," present briefly the most commonly used statistical techniques. Professor Johnson has a well-earned reputation for clear presentation of statistics, and these chapters are up to his usual standard. Extensive illustration, coupled with careful delineation of the pitfalls and abuses of various statistical treatments,

should make these chapters valuable to students and field workers. However, the chapters do suffer from the assumption that many students will have no previous statistical work. The computation of the arithmetic mean is displayed in detail, but, on the other hand, such relatively complex procedures as analysis of variance and covariance, test of significance, multiple regression and the discriminant function are only briefly described. Both confidence limits and fiducial limits are mentioned. One suspects that the student with no prior statistical background might become somewhat bewildered.

It is difficult to make a fair summary of this book. It suffers somewhat from lack of continuity—a fate almost unavoidable in a book to which several authors contribute independently written chapters. It suffers from the tremendous breadth of material required by condensing the essence of at least three separate courses into a single book. Perhaps the major weakness of the book lies in a situation which is no fault of the authors. Research courses vary greatly in their position in the graduate curriculum and in the prerequisites. If at least one course in tests and measurements and one course in statistics could be assumed, it would greatly simplify the task of textbook writers. When one must admit the possibility that some students have had neither of these courses, the discussion of research techniques either must be accompanied by careful explanation of the simplest statistical and measurement concepts and techniques or must be on a descriptive level with the expectation that the student becomes aware of certain possibilities and will "dig them out" for himself if he ever needs them. This dilemma would be difficult for one writer to resolve; it may be unsolvable in one book by several writers. Certainly it was not solved here.

Yet this book contains much worth-while material, and the broad experience of the authors in educational research is obvious throughout its pages. The emphasis of the multivariate approach is also to be com-

mended. Used in a year course along with a book on statistics and a more classical treatment of the techniques of educational research, the book should be highly effective. Used with students having prior courses in measurement and statistics, the book would be appropriate although unnecessarily loaded with elementary material. For students with no background, taking a one-quarter or one-semester course, it seems likely that the book would be overwhelming, but one may question whether such students should be permitted to take a course in educational research. For field workers requiring occasional refresher reading, the book should be excellent.

PAUL L. DRESSEL

Michigan State College



WILLIAM DAVID REEVE, *Mathematics for the Secondary School*. New York 17: Henry Holt & Co., 1954. Pp. xii+548. \$5.95.

The turn of the century marked the beginning of a number of far-reaching movements to improve the selection, organization, and teaching of the materials of secondary-school mathematics. The literature relating to these movements consists of reports of committees and commissions, articles published in mathematical journals, papers read at conventions of associations, and findings of a great deal of research. This literature has grown to be so extensive that teachers and supervisors of mathematics find it increasingly difficult to obtain, conveniently, assistance with the specific problems which arise in their everyday work in the classroom. The author of *Mathematics for the Secondary School* undertakes to meet a real need by providing a brief, yet clear and comprehensive, summary of recommendations for organizing courses, illustrations of effective teaching procedures, and suggestions for arousing and maintaining the interest of the pupils.

The major part of the book is concerned

with teaching procedures. With his background of many years of teaching high-school pupils, of preparing prospective teachers, and of training teachers in service, Professor Reeve is thoroughly acquainted with the troublesome problems and difficulties encountered by each of these groups. He knows how to deal with them and is well qualified to give advice. Teachers will find in the book what they greatly need: chapters filled with well-chosen examples illustrating specific procedures used in teaching mathematics, from arithmetic to analytic geometry.

Moreover, the author is aware that a subject not only must be well taught but also must be well motivated, and teachers will find much to aid them with this problem.

In addition to giving help with the teaching problems, attention is directed to questions about the curriculum. Valuable aid is provided for those who are responsible for the organization of courses of study. Here we find a brief history of the development of the modern mathematics curriculum, suggestions for the selection and organization of suitable instructional materials for junior and senior high school pupils, objectives to be attained by them, and a program of evaluation of the product of teaching. For those who wish to engage in research, there is a bibliography which will amply satisfy their needs. Especially valuable is the record of important contributions of recent date.

A third portion of the book offers full discussion of classroom equipment important to success in teaching. The book ends with a presentation of the outlook for mathematics in our schools.

A valuable feature of this volume is found in the tests provided at the close of the various chapters. These may be used as self-tests by the reader or may form the basis for further class discussions in methods courses.

It is apparent that the publishers have aimed to make *Mathematics for the Secondary School* a volume of attractive appearance. Typography and arrangement are excellent; diagrams, charts, graphs are clear and effective.



tive. This is a book which teachers will be glad to add to their private libraries or see added to the school library. It is suitable as a textbook in courses on the teaching of mathematics and as an aid to teachers in service.

E. R. BRESLICH

University of Chicago



JANE WARTERS, *Techniques of Counseling*. New York 36: McGraw-Hill Book Co., Inc., 1954. Pp. viii+384. \$4.75.

*Techniques of Counseling* is a formal survey of present-day practices in student personnel work at the high-school and college levels. It is designed primarily as an elementary textbook for persons entering the field. The author deals with the procedures and tools most commonly employed by guidance workers in schools: tests, observation reports, self-reports, cumulative personnel records, case studies, case conferences, and interviews. Techniques of an "advanced nature," such as projective techniques, are not considered. Environmental treatment and group-work methods are briefly touched on in the last chapter.

The author is careful to note, in chapter i, the tendency among administrators to appoint teachers untrained in guidance to handle the guidance work. However, rather than emphasize the many dangers inherent in such a policy, she apparently resigns herself to this trend, suggesting that "perhaps the best thing to do is to follow the lead of many of the teachers who have been assigned guidance functions for which they feel unprepared—accept the situation and try to improve it" (p. 9).

Chapters ii-iv offer a nicely balanced treatment of tests of intelligence, achievement, aptitude, interest, and personality. The following chapter on "Recording and Reporting Test Results" reviews norms, mental ages, intelligence quotients, age and grade scores, and percentile and standard

scores. Chapter v also contains sample cumulative forms and test records.

In the discussion of anecdotal reports we find a rather stereotyped attitude and approach toward the teacher's role and responsibility, as well as toward the use of such reports. This warning is sounded:

The teacher should remember that he is the one taking the picture and so is not expected to be in it. He takes care to keep out of it by putting in nothing of his opinions or feelings regarding the incident [p. 101].

This objectivity is hardly possible to achieve, for the teacher must necessarily select particular statements, behaviors, and activities of a given student from many possibilities available in daily observation. In making the selection, the teacher ultimately reflects his own emotional involvement with that student, his own expectations regarding behavior, routine, and the like. Furthermore, if the guidance worker really wants to learn something about the interpersonal relations between teacher and student—and he should so desire—he will welcome expressions of opinions and feelings from the teacher concerning individual students.

Anecdotal reports are seen here, however, as having the following purposes:

To increase teacher understanding of student behavior . . . to help the school workers see the student as a many-sided changing individual and to throw light on the various aspects of his growth, to supply information useful in helping the student to understand himself and useful in interpreting the student to his teachers, parents, prospective employers, and others [p. 110].

While these purposes are commendable, their scope might well be broadened. The guidance worker must take the initiative in working through with the teacher the nature of the latter's interpersonal relationship with the student, for often in that relationship we find the core of the child's problem in a particular classroom setting. Of course it is true that this is delicate business and that we know little about *how* to bring about a helpful relationship. But our lack of knowledge is

a poor excuse for evading an attempt at a necessary task. To embark on this approach means using at least one more technique not discussed in this book, namely, observation of children in their natural school and extra-curriculum situations. The anecdotal report is a poor substitute for actually watching interactions between teacher and child, between the teacher and the group, and between the child and the group.

Teachers are not to be criticized for having become suspicious and distrustful of written reports of many types. It is not necessarily the increase in work that they resent (though this is a factor) but rather the fact that too often they gain no concrete help in relating to a child or in dealing with the problem the child may present in the day-to-day classroom situation. Concrete help is

possible to an increased degree if the guidance worker has observed teacher and child together. Such observation, admittedly, consumes much time, but it is, in the reviewer's opinion, a more fruitful, dynamic approach to understanding the interpersonal relations in a school environment than is exclusive reliance on cumulative records and test results.

There is no effort in *Techniques of Counseling* to bridge this survey of methods and techniques with an explicitly formulated psychological framework. But in spite of this omission, the author has presented us with a fine textbook which can be utilized as a take-off point for beginning students in the field of guidance work.

GEORGE KAISER

Laboratory School  
University of Chicago



### CURRENT PUBLICATIONS RECEIVED

#### METHOD, HISTORY, THEORY, AND PRACTICE

CLARK, JOHN R., and EADS, LAURA K. *Guiding Arithmetic Learning*. Yonkers-on-Hudson 5, New York: World Book Co., 1954. Pp. 282.

CURTIS, DWIGHT K., and ANDREWS, LEONARD O. *Guiding Your Student Teacher*. New York 11: Prentice-Hall, Inc., 1954. Pp. xvi+384. \$5.50.

ERDT, MARGARET HAMILTON. *Teaching Art in the Elementary School*. New York 16: Rinehart & Co., Inc., 1954. Pp. xvi+284. \$6.00.

HARRIS, THISTLE Y. *The Teaching of Nature Study: A Practical Guide for Teachers in Primary Schools*. Melbourne, Australia: Australian Council for Educational Research, 1954. Pp. viii+100.

HIGHET, GILBERT. *The Art of Teaching*. New York 22: Vintage Books, 1954 (originally published by Alfred A. Knopf, Inc., 1950). Pp. xviii+260+vi. \$0.95.

*Language Arts for Today's Children*. Prepared by the COMMISSION ON THE ENGLISH CURRICULUM OF THE NATIONAL COUNCIL OF TEACHERS OF ENGLISH. New York 1: Appleton-Century-Crofts, Inc., 1954. Pp. xvi+432. \$3.75.

ROSS, VIVIAN. *Handbook for Homeroom Guidance*. New York 11: Macmillan Co., 1954. Pp. xiv+134. \$2.50.

RUSK, ROBERT R. *The Doctrines of the Great Educators*. New York 17: St Martin's Press, 1954 (revised and enlarged). Pp. viii+312. \$2.75.

SCHMIDT, WARREN H., and BUCHANAN, PAUL C. *Techniques That Produce Teamwork*. New London, Connecticut: Arthur C. Croft Publications, 1954. Pp. iv+76. \$2.50.

SIMPSON, ELIZABETH A. *Helping High-School Students Read Better: A Program Manual for Teachers and Administrators*. Chicago 10: Science Research Associates, Inc., 1954. Pp. viii+146. Cloth, \$3.60. Paper, \$2.95.

WOLFENSTEIN, MARTHA. *Children's Humor: A Psychological Analysis*. Glencoe, Illinois: Free Press, 1954. Pp. 224. \$3.75.

#### BOOKS FOR HIGH-SCHOOL TEACHERS AND PUPILS

AUGSPURGER, EVERETT, and MCLEMORE, RICHARD AUBREY. *Our Nation's Story*. Chicago 6: Laidlaw Bros., 1954. Pp. 864. \$4.28.

BENTLEY, ERIC. *In Search of Theater*. New York 22: Vintage Books, Inc., 1953 (originally published by Alfred A. Knopf, Inc., 1947). Pp. xiv+386+xii. \$0.95.

EINSTEIN, ALFRED. *A Short History of Music*. Translated from the German. Fourth American Edition, Revised. New York 22: Vintage Books, Inc., 1954 (originally published by Alfred A. Knopf, Inc., 1937). Pp. 206+viii. \$0.95.

JARRETT EDITH MOORE. *El camino real*, Book Two. Boston 8: Houghton Mifflin Co., 1954 (third edition). Pp. xii+604. \$3.80.

KRICK, IRVING P., and FLEMING, ROSCOE. *Sun, Sea and Sky: Weather in Our World and in Our Lives*. Philadelphia 5: J. B. Lippincott Co. 1954. Pp. 248. \$3.95.

Macmillan English Series: *Talk, Read, Write, Listen* by THOMAS CLARK POLLOCK, KATHERINE POLLOCK, and FLORENCE B. BOWDEN, pp. 152, \$1.76; *Learning Together* by THOMAS CLARK POLLOCK and FLORENCE B. BOWDEN, pp. viii+280, \$1.96; *Words Work for You* by THOMAS CLARK POLLOCK and FLORENCE B. BOWDEN, pp. viii+280, \$1.96; *Using Language* by THOMAS CLARK POLLOCK and JOHN J. FORESTER, pp. viii+312, \$2.04; *Sharing Ideas* by THOMAS CLARK POLLOCK and J. HAROLD STRAUB, pp. viii+328, \$2.12; *Words and Ideas* by THOMAS CLARK POLLOCK and ROBERT W. ROUNDS, pp. viii+392, \$2.32; *Thought and Expression* by THOMAS CLARK POLLOCK, JOHN P. MILLIGAN and RICHARD L. LOUGHLIN, pp. viii+440, \$2.32. New York 11: Macmillan Co., 1954.

ROTH, LAWRENCE V., and HOBBS, STILLMAN M. *Your World and You*. Chicago 6: Laidlaw Bros., 1954. Pp. 640. \$3.40.

RUBY, LIONEL. *The Art of Making Sense: A Guide to Logical Thinking*. Philadelphia 5: J. B. Lippincott Co., 1954. Pp. 286. \$3.75.

SOWERS, ROBERT. *The Lost Art: A Survey of One Thousand Years of Stained Glass*. Problems of Contemporary Art No. 7. New York 22: George Wittenborn Inc., 1954. Pp. 80. \$4.00.

TOCQUEVILLE, ALEXIS DE. *Democracy in America*. The Henry Reeve Text as Revised by Francis Bowen Now Further Corrected and Edited with a Historical Essay, Editorial Notes, and Bibliographies by Phillips Bradley. Vol. I, pp. xvi+452+xii, \$0.95; Vol. II, pp. xii+518+x, \$0.95. New York 22: Vintage Books, Inc., 1954 (originally published by Alfred A. Knopf, Inc., 1945).

TODD, LEWIS PAUL, and COOPER, KENNETH S. *New Ways in the New World*, pp. x+350, \$3.68; *World Ways*, pp. x+398, \$3.72. New York 3: Silver Burdett Co., 1954.

VAN RIPER, CHARLES G., and SMITH, DOROTHY EDNA. *An Introduction to General American Phonetics*. New York 16: Harper & Bros., 1954. Pp. vi+152.

#### PUBLICATIONS IN PAMPHLET FORM

APPLEGATE, MELBOURNE S. *Understanding That Boy of Yours*. Washington 8: Public Affairs Press, 1953. Pp. 52. \$1.00.

CALKINS, ROBERT D., RICH, WILMER SHIELDS, and TUNKS, L. K. *The Impact of Foundations on Higher Education*. Chicago 37: Commission on Colleges and Universities, North Central Association of Colleges and Secondary Schools (5835 Kimbark Avenue), [1954]. Pp. iv+28.

"Challenges Galore in '54 for Guidance and Health." Edited by WARREN H. SOUTHWORTH and DESMOND D. O'CONNELL. Coordinated Conferences on Guidance, Personnel Services, and Health Education Sponsored by the Department of

- Education, University Extension Division, the Office of Summer Session of the University of Wisconsin and the Wisconsin Association of Educational and Vocational Guidance, Industrial and Educational Counselors Association, the State Department of Public Instruction, the State Board of Vocational and Adult Education, the State Board of Health. Madison, Wisconsin: Kramer Business Service, 1954. Pp. 80 (mimeographed). \$1.00.
- Evaluation and Adjustment Series. Edited by WALTER N. DUROST. Brown-Carlson Listening Comprehension Test by JAMES I. BROWN and G. ROBERT CARLSEN; Center-Durost Literature Acquaintance Test by STELLA S. CENTER and WALTER N. DUROST; Kelley-Greene Reading Comprehension Test by VICTOR H. KELLEY and HARRY A. GREENE; Spitzer Study Skills Test by HERBERT F. SPITZER. Yonkers-on-Hudson 5, New York: World Book Co., 1953, 1954.
- Forty-first Annual Schoolmen's Week Proceedings: Joint Meeting with Southeastern Convention District, Pennsylvania State Education Association, April 7-10, 1954. University of Pennsylvania Bulletin, Vol. LV, No. 1. Philadelphia 4: University of Pennsylvania, 1954. Pp. vi+152. \$1.00.
- Free and Inexpensive Teaching Aids for Social Studies. Compiled by FREDERICK K. BRANOM. Chicago Schools Journal, Vol. XXXVI, Nos. 1-2. Chicago 21: Chicago Teachers College, 1954. Pp. 34.
- FURNESS, EDNA L. "Trends in Recent Literature on Teaching the Language Arts." Bulletin No. 3. Laramie, Wyoming: Published for the Wyoming School Study Council by the Bureau of Educational Research and Service, College of Education, University of Wyoming, 1954. Pp. 34 (processed). \$0.75.
- Grouping . . . Problems and Satisfaction. Reprint Service Bulletin No. 26. Washington 5: Association for Childhood Education International, 1953, 1954. Pp. 40. \$0.50.
- A Guide for Hearing Testing of School Children in the Public Schools of California. Recommendations of California State Department of Public Health and California State Department of Education. Sacramento, California: State Department of Education, 1954. Pp. vi+30.
- HENDERSON, HOWARD. A Businessman Looks at Education. Public Affairs Pamphlet No. 211. New York 16: Public Affairs Committee, 1954. Pp. 28. \$0.25.
- INDIANA ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS. Promising Curriculum Practices in Secondary Schools in Indiana. Bulletin of the School of Education, Indiana University, Vol. XXX, No. 4. Bloomington, Indiana: Division of Research and Field Services, Indiana University, 1954. Pp. 98. \$1.00.
- "Official Report of the Visiting Educator Program, September-December, 1953." Madison 5, Wisconsin: School of Education, University of Wisconsin, [n.d.]. Pp. 117 (processed).
- Official Sports Library for Girls and Women. Official Archery-Riding Guide, June 1954—June 1956 edited by CORINNE BIZE and BEATRICE T. CAMPBELL; Official Bowling-Fencing-Golf Guide, June 1954—June 1956 edited by CORINNE T. BIZE, MARJORIE TATE, HERTA FRIEDRICH, and VIRGINIA NILLES; Official Soccer-Speedball Guide including Field Ball for Girls and Women with Official Rules, July 1954—July 1956 edited by ANN LANKFORD and PATRICIA SPARROW; Official Tennis-Badminton Guide with Official Rules, June 1954—June 1956 edited by CATHARINE SAMPLE and PATRICIA WHITAKER. Washington 6: American Association for Health, Physical Education, and Recreation, 1954. Pp. 128 each. \$0.75 each.
- "Our Home Away from Home: The Story of Twenty-seven Visiting Educators Who Came to the University of Wisconsin from Nineteen Different Countries." Madison 5, Wisconsin: Visiting Educator

- Program, School of Education, University of Wisconsin, 1954. Pp. iii+44 (processed).
- Plays for Children: A Selected List.* Anchorage, Kentucky: Children's Theatre Press, [n.d.]. Pp. 70. \$0.10.
- Report on Omnibus, 1953-1954: The TV-Radio Workshop of the Ford Foundation.* New York 21: Ford Foundation, [n.d.]. Pp. 24 (unnumbered).
- RUSSELL, DAVID H. *The Dimensions of Children's Meaning Vocabularies in Grades Four through Twelve.* University of California Publications in Education, Vol. XI, No. 5. Berkeley and Los Angeles: University of California Press, 1954. Pp. 315-414. \$1.25.
- UNITED STATES CHILDREN'S BUREAU. "Motion Pictures on Child Life, Supplement No. 1." Compiled by INEZ D. LOHR. Washington 25: Government Printing Office, 1954. Pp. 16. \$0.15.
- UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS, in cooperation with VETERANS ADMINISTRATION. Occupational Outlook Series: Bulletin No. 1151, *Employment Outlook in the Industrial Chemical Industry*, pp. vi+38, \$0.30; Bulletin No. 1167, *Employment Outlook in the Social Sciences: Fields of Employment, Educational Requirements, Employment Outlook, Earnings*, pp. vi+66. \$0.30. Washington 25: Government Printing Office, 1954.
- What Does Crowding Do?* Reprint Service Bulletin No. 27. Washington 5: Association for Childhood Education International, 1954. Pp. 30. \$0.50.
- Where To Buy Supplies for Educational Institutions.* Boston 8: Porter Sargent Publishers, 1954 (14th edition). Pp. 160.
- UNITED NATIONS:
- Food and Agriculture Organization—*Growing Food for a Growing World: The Work of FAO, 1952-53.* Pp. 38. \$0.50.
- Food and Agriculture Organization, Nutritional Studies, No. 10 (1953)—*School Feeding: Its Contribution to Child Nutrition* by MARJORIE L. SCOTT. Pp. vi+128. \$1.00.
- Publication 1954.1.6—*How To Find Out about the United Nations: Facts about the United Nations and Materials Available.* Revised. Pp. 68. \$0.15.
- Publication 1954.1.7—*The Economic Growth of Twenty Republics: The Work of the Economic Commission for Latin America.* Pp. 32. \$0.15.
- The United Nations: The First Eight Years: What It Is . . . What It Is Not . . . What It Does . . . What It Costs . . .* Pp. 16.
- United Nations at Work, No. 8—*Decisions and Prospects for 1954: A Record of Action Taken by the General Assembly during the First Part of Its Eighth Session* (Publications 1954.1.4). Pp. 52. \$0.15.
- United Nations at Work, No. 9—*A Year of Tangible Results: A Review of the Work of the Specialized Agencies and Children's Fund during 1953* (Publications 1954.1.5). Pp. 20. \$0.15.
- UNITED STATES OFFICE OF EDUCATION:
- Bulletin 1954, No. 1—*State Certification Requirements for Teachers of Exceptional Children* by ROMAINE P. MACKIE and LLOYD M. DUNN. Pp. viii+60. \$0.25.
- Bulletin 1954, No. 12—*How Children Can Be Creative* by WILHELMINA HILL, HELEN K. MACKINTOSH, and ARNE RANDALL. Pp. vi+24. \$0.15.
- Circular No. 404, 1954—"Factors Affecting the Improvement of Secondary Education: Condensed Record of a Round Table Discussion." Edited by HOWARD H. CUMMINGS, J. DAN HULL, JOHN R. LUDINGTON, and BERENICE MALLORY. Pp. x+132. \$0.70.



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